TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-108883-1
Client Project/Site: Ford LTP Livonia MI - E203631

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

Attn: Kristoffer Hinskey

Authorized for release by:
3/19/2019 11:14:11 AM

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 240-108883-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP Livonia MI - E203631

Report Number: 240-108883-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control sample was within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, sample was diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 3/5/2019 8:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample MW-117S_030119 (240-108883-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 03/12/2019.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for MW-117S_030119 (240-108883-1). Refer to the QC report for details.

Surrogate recovery for the following sample was outside the upper control limit: MW-117S_030119 (240-108883-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

The MSD for batch 240-371223 was analyzed outside of the tune time, due to an instrument fault. This is a batch QC sample; therefore, the data have been reported: (240-108878-D-1 MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Job ID: 240-108883-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Sample MW-117S_030119 (240-108883-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 03/11/2019.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-108883-1	MW-117S_030119	Water	03/01/19 13:55	03/05/19 08:15

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Client Sample ID: MW-117S_030119

Lab Sample ID: 240-108883-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.26	J	1.0	0.10	ug/L	1		8260B	Total/NA
Vinyl chloride	0.66	J	1.0	0.20	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Client Sample ID: MW-117S_030119
Date Collected: 03/01/19 13:55
Date Received: 03/05/19 08:15

Lab Sample ID: 240-108883-1
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/11/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 125*		*03/11/19 18:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 21:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/19 21:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/19 21:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 21:42	1
Trichloroethene	**0.26**	**J**	1.0	0.10	ug/L			03/12/19 21:42	1
Vinyl chloride	**0.66**	**J**	1.0	0.20	ug/L			03/12/19 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*	*X*	*70 - 121*		*03/12/19 21:42*	*1*
4-Bromofluorobenzene (Surr)	*86*		*59 - 120*		*03/12/19 21:42*	*1*
Toluene-d8 (Surr)	*96*		*70 - 123*		*03/12/19 21:42*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 128*		*03/12/19 21:42*	*1*

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: ICV 240-348143/9 Calibration Date: 10/02/2018 14:33

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2939	0.2989		0.0102	0.0100	1.7	50.0
Chloromethane	Ave	0.2643	0.2617	0.1000	0.00990	0.0100	-1.0	50.0
Vinyl chloride	Ave	0.2893	0.2993		0.0103	0.0100	3.5	20.0
Butadiene	Ave	0.3026	0.2762		0.00913	0.0100	-8.7	50.0
Bromomethane	Ave	0.1867	0.1932		0.0103	0.0100	3.5	50.0
Chloroethane	Ave	0.1894	0.1931		0.0102	0.0100	2.0	50.0
Dichlorofluoromethane	Ave	0.4442	0.4597		0.0103	0.0100	3.5	50.0
Trichlorofluoromethane	Ave	0.3768	0.3828		0.0102	0.0100	1.6	50.0
Ethyl ether	Ave	0.1986	0.1978		0.00996	0.0100	-0.4	50.0
Acrolein	Ave	0.0228	0.0262		0.0574	0.0500	14.9	50.0
1,1-Dichloroethene	Ave	0.2432	0.2410		0.00991	0.0100	-0.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1843	0.1806		0.00980	0.0100	-2.0	50.0
Acetone	Lin1		0.0550		0.0193	0.0200	-3.6	50.0
Iodomethane	Ave	0.3597	0.3682		0.0102	0.0100	2.4	50.0
Carbon disulfide	Ave	0.7146	0.6913		0.00967	0.0100	-3.3	50.0
3-Chloro-1-propene	Ave	0.1449	0.1428		0.00986	0.0100	-1.4	50.0
Methyl acetate	Ave	0.1271	0.1244		0.0196	0.0200	-2.2	50.0
Methylene Chloride	Ave	0.2529	0.2477		0.00980	0.0100	-2.0	50.0
2-Methyl-2-propanol	Lin1		0.0016		0.0996	0.100	-0.4	50.0
Acrylonitrile	Ave	0.0694	0.0682		0.0983	0.100	-1.7	50.0
Methyl tert-butyl ether	Ave	0.6114	0.5966		0.00976	0.0100	-2.4	50.0
trans-1,2-Dichloroethene	Ave	0.2697	0.2735		0.0101	0.0100	1.4	50.0
Hexane	Ave	0.0738	0.0744		0.0101	0.0100	0.8	20.0
1,1-Dichloroethane	Ave	0.4441	0.4347	0.1000	0.00979	0.0100	-2.1	50.0
Vinyl acetate	Ave	0.3870	0.3711		0.00959	0.0100	-4.1	50.0
2,2-Dichloropropane	Ave	0.0513	0.0508		0.00989	0.0100	-1.1	50.0
cis-1,2-Dichloroethene	Ave	0.2948	0.2856		0.00969	0.0100	-3.1	50.0
2-Butanone (MEK)	Ave	0.0805	0.0752		0.0187	0.0200	-6.6	50.0
Chlorobromomethane	Ave	0.1325	0.1299		0.00980	0.0100	-2.0	50.0
Tetrahydrofuran	Ave	0.0469	0.0459		0.0196	0.0200	-2.2	50.0
Chloroform	Ave	0.4497	0.4437		0.00987	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.3416	0.3484		0.0102	0.0100	2.0	50.0
Cyclohexane	Ave	0.4081	0.4032		0.00988	0.0100	-1.2	50.0
1,1-Dichloropropene	Ave	0.3624	0.3527		0.00973	0.0100	-2.7	50.0
Carbon tetrachloride	Ave	0.3148	0.3097		0.00984	0.0100	-1.6	50.0
Isobutyl alcohol	Ave	0.0058	0.0049		0.210	0.250	-15.9	50.0
Benzene	Ave	1.090	1.065		0.00977	0.0100	-2.3	50.0
1,2-Dichloroethane	Ave	0.3592	0.3525		0.00981	0.0100	-1.9	50.0
n-Heptane	Ave	0.0722	0.0738		0.0102	0.0100	2.3	50.0
Trichloroethene	Ave	0.2857	0.2823		0.00988	0.0100	-1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: ICV 240-348143/9 Calibration Date: 10/02/2018 14:33

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4404	0.4243		0.00963	0.0100	-3.7	50.0
1,2-Dichloropropane	Ave	0.2558	0.2540		0.00993	0.0100	-0.7	20.0
1,4-Dioxane	Ave	0.0022	0.0015		0.137	0.200	-31.3	50.0
Dibromomethane	Ave	0.1493	0.1453		0.00973	0.0100	-2.7	50.0
Dichlorobromomethane	Ave	0.3314	0.3266		0.00985	0.0100	-1.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1376	0.1325		0.00963	0.0100	-3.7	50.0
cis-1,3-Dichloropropene	Ave	0.3689	0.3793		0.0103	0.0100	2.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1508	0.1533		0.0203	0.0200	1.6	50.0
Toluene	Ave	1.569	1.534		0.00978	0.0100	-2.2	20.0
trans-1,3-Dichloropropene	Ave	0.4240	0.4199		0.00990	0.0100	-1.0	50.0
Ethyl methacrylate	Ave	0.3372	0.3424		0.0102	0.0100	1.6	50.0
1,1,2-Trichloroethane	Ave	0.2814	0.2814		0.0100	0.0100	0.0	50.0
Tetrachloroethene	Ave	0.2930	0.2912		0.00994	0.0100	-0.6	50.0
1,3-Dichloropropane	Ave	0.5102	0.4994		0.00979	0.0100	-2.1	50.0
2-Hexanone	Ave	0.1307	0.1326		0.0203	0.0200	1.5	50.0
Chlorodibromomethane	Ave	0.3015	0.3040		0.0101	0.0100	0.8	50.0
Ethylene Dibromide	Ave	0.2703	0.2658		0.00983	0.0100	-1.7	50.0
Chlorobenzene	Ave	1.023	1.001	0.3000	0.00979	0.0100	-2.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3300	0.3319		0.0101	0.0100	0.6	50.0
Ethylbenzene	Ave	0.5387	0.5397		0.0100	0.0100	0.2	20.0
m-Xylene & p-Xylene	Ave	0.6593	0.6637		0.0101	0.0100	0.7	50.0
o-Xylene	Ave	0.6356	0.6513		0.0102	0.0100	2.5	50.0
Styrene	Ave	1.079	1.090		0.0101	0.0100	1.1	50.0
Bromoform	Ave	0.1635	0.1636	0.1000	0.0100	0.0100	0.0	50.0
Isopropylbenzene	Ave	1.667	1.697		0.0102	0.0100	1.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6053	0.5880	0.3000	0.00971	0.0100	-2.9	50.0
Bromobenzene	Ave	0.7623	0.7458		0.00978	0.0100	-2.2	50.0
1,2,3-Trichloropropane	Ave	0.2099	0.2029		0.00966	0.0100	-3.4	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1500		0.00898	0.0100	-10.2	50.0
N-Propylbenzene	Ave	0.8758	0.8879		0.0101	0.0100	1.4	50.0
2-Chlorotoluene	Ave	0.7521	0.7365		0.00979	0.0100	-2.1	50.0
1,3,5-Trimethylbenzene	Ave	2.646	2.622		0.00991	0.0100	-0.9	50.0
4-Chlorotoluene	Ave	0.8121	0.7994		0.00984	0.0100	-1.6	50.0
tert-Butylbenzene	Ave	2.251	2.256		0.0100	0.0100	0.2	50.0
1,2,4-Trimethylbenzene	Ave	2.764	2.748		0.00994	0.0100	-0.6	50.0
sec-Butylbenzene	Ave	3.230	3.187		0.00987	0.0100	-1.3	50.0
1,3-Dichlorobenzene	Ave	1.523	1.496		0.00983	0.0100	-1.7	50.0
4-Isopropyltoluene	Ave	2.782	2.811		0.0101	0.0100	1.0	50.0
1,4-Dichlorobenzene	Ave	1.586	1.521		0.00959	0.0100	-4.1	50.0
n-Butylbenzene	Ave	2.339	2.297		0.00982	0.0100	-1.8	50.0
1,2-Dichlorobenzene	Ave	1.432	1.409		0.00983	0.0100	-1.7	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: ICV 240-348143/9 Calibration Date: 10/02/2018 14:33

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0976	0.0899		0.00921	0.0100	-7.9	50.0
1,2,4-Trichlorobenzene	Ave	0.8495	0.7913		0.00931	0.0100	-6.9	50.0
Hexachlorobutadiene	Ave	0.3938	0.3504		0.00890	0.0100	-11.0	50.0
Naphthalene	Ave	1.768	1.697		0.00960	0.0100	-4.0	50.0
1,2,3-Trichlorobenzene	Ave	0.7739	0.7273		0.00940	0.0100	-6.0	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6924.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2018 14:33:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-009
Operator ID: 001644 Instrument ID: A3UX17
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:29:14 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1724209	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.467	0.012	85	1311821	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	700255	10.0	10.0	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	515412	10.0	10.2	
10 Chloromethane	50	1.885	1.886	-0.001	98	451198	10.0	9.90	
11 Vinyl chloride	62	2.004	2.004	0.000	98	516019	10.0	10.3	
119 Butadiene	54	2.040	2.040	0.000	90	476273	10.0	9.13	
12 Bromomethane	94	2.360	2.360	0.000	91	333065	10.0	10.3	
13 Chloroethane	64	2.467	2.467	-0.001	99	332965	10.0	10.2	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	792657	10.0	10.3	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	660061	10.0	10.2	
16 Ethyl ether	59	2.988	2.988	0.000	89	341106	10.0	9.96	
18 Acrolein	56	3.119	3.119	0.000	99	225652	50.0	57.4	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	98	415556	10.0	9.91	
20 1,1,2-Trichloro-1,2,2-trif	151	3.237	3.226	0.011	91	311302	10.0	9.80	
21 Acetone	43	3.273	3.273	0.000	100	189694	20.0	19.3	
22 Iodomethane	142	3.356	3.356	0.000	99	634906	10.0	10.2	
23 Carbon disulfide	76	3.427	3.427	0.000	99	1191995	10.0	9.67	
25 3-Chloro-1-propene	76	3.557	3.546	0.011	90	246265	10.0	9.86	
26 Methyl acetate	43	3.569	3.569	0.000	97	428928	20.0	19.6	
27 Methylene Chloride	84	3.664	3.664	0.000	89	427139	10.0	9.80	
30 Methyl tert-butyl ether	73	3.901	3.902	-0.001	95	1028612	10.0	9.76	
29 Acrylonitrile	53	3.901	3.902	-0.001	98	1175597	100.0	98.3	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	99	471522	10.0	10.1	
28 2-Methyl-2-propanol	59	3.901	3.913	-0.012	27	27446	100.0	99.6	
32 Hexane	86	4.139	4.139	0.000	92	128337	10.0	10.1	
33 1,1-Dichloroethane	63	4.293	4.293	0.000	96	749530	10.0	9.79	
34 Vinyl acetate	43	4.328	4.328	0.000	97	639835	10.0	9.59	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	87558	10.0	9.89	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	81	492366	10.0	9.69	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	98	259425	20.0	18.7	
44 Chlorobromomethane	128	5.004	5.004	0.000	95	223910	10.0	9.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 Tetrahydrofuran	42	5.040	5.040	0.000	94	158223	20.0	19.6	
46 Chloroform	83	5.064	5.064	0.000	92	765063	10.0	9.87	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	600647	10.0	10.2	
48 Cyclohexane	56	5.265	5.265	0.000	88	695130	10.0	9.88	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	95	608168	10.0	9.73	
50 Carbon tetrachloride	117	5.360	5.360	0.000	86	534007	10.0	9.84	
51 Isobutyl alcohol	41	5.431	5.431	0.000	92	159990	250.0	210.3	
52 Benzene	78	5.550	5.550	0.000	96	1836203	10.0	9.77	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	607846	10.0	9.81	
55 n-Heptane	100	5.739	5.740	-0.001	88	127282	10.0	10.2	
57 Trichloroethene	130	6.083	6.083	0.000	97	486719	10.0	9.88	
59 Methylcyclohexane	83	6.249	6.249	0.000	88	731557	10.0	9.63	
60 1,2-Dichloropropane	63	6.297	6.285	0.012	93	437894	10.0	9.93	
62 Dibromomethane	93	6.392	6.392	0.000	97	250448	10.0	9.73	
63 1,4-Dioxane	88	6.392	6.404	-0.012	38	50961	200.0	137.4	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	563057	10.0	9.85	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	228484	10.0	9.63	
67 cis-1,3-Dichloropropene	75	6.913	6.914	-0.001	95	653943	10.0	10.3	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	95	528521	20.0	20.3	
69 Toluene	91	7.210	7.210	0.000	98	2012633	10.0	9.78	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	93	550840	10.0	9.90	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	449176	10.0	10.2	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	92	369197	10.0	10.0	
73 Tetrachloroethene	164	7.708	7.708	0.000	96	381994	10.0	9.94	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	89	655055	10.0	9.79	
76 2-Hexanone	43	7.779	7.779	0.000	95	347994	20.0	20.3	
78 Chlorodibromomethane	129	7.945	7.933	0.012	89	398742	10.0	10.1	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	348674	10.0	9.83	
81 Chlorobenzene	112	8.502	8.503	-0.001	97	1312989	10.0	9.79	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	94	435403	10.0	10.1	
83 Ethylbenzene	106	8.585	8.586	-0.001	98	708023	10.0	10.0	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	870619	10.0	10.1	
85 o-Xylene	106	9.072	9.072	0.000	95	854394	10.0	10.2	
86 Styrene	104	9.084	9.084	0.000	95	1430397	10.0	10.1	
87 Bromoform	173	9.285	9.285	0.000	96	214556	10.0	10.0	
89 Isopropylbenzene	105	9.427	9.428	-0.001	95	2226153	10.0	10.2	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	411749	10.0	9.71	
92 Bromobenzene	156	9.736	9.736	0.000	95	522254	10.0	9.78	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	82	142054	10.0	9.66	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	67	105045	10.0	8.98	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	621776	10.0	10.1	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	515733	10.0	9.79	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1835755	10.0	9.91	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	559790	10.0	9.84	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	1579893	10.0	10.0	
101 1,2,4-Trimethylbenzene	105	10.352	10.364	-0.012	96	1924513	10.0	9.94	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	2231950	10.0	9.87	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	1968086	10.0	10.1	
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	97	1047666	10.0	9.83	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	1064837	10.0	9.59	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	1608196	10.0	9.82	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	986319	10.0	9.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	82	62966	10.0	9.21	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	95	554101	10.0	9.31	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	97	245361	10.0	8.90	
115 Naphthalene	128	12.985	12.985	0.000	100	1188597	10.0	9.60	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	509292	10.0	9.40	
S 130 Xylenes, Total	106				0		20.0	20.3	
S 131 Trihalomethanes, Total	1				0		40.0	39.8	

Reagents:

VMFASAW_00250	Amount Added:	8.00	Units: uL
VMFASPW_00269	Amount Added:	8.00	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL
VMFASGW_00276	Amount Added:	8.00	Units: uL

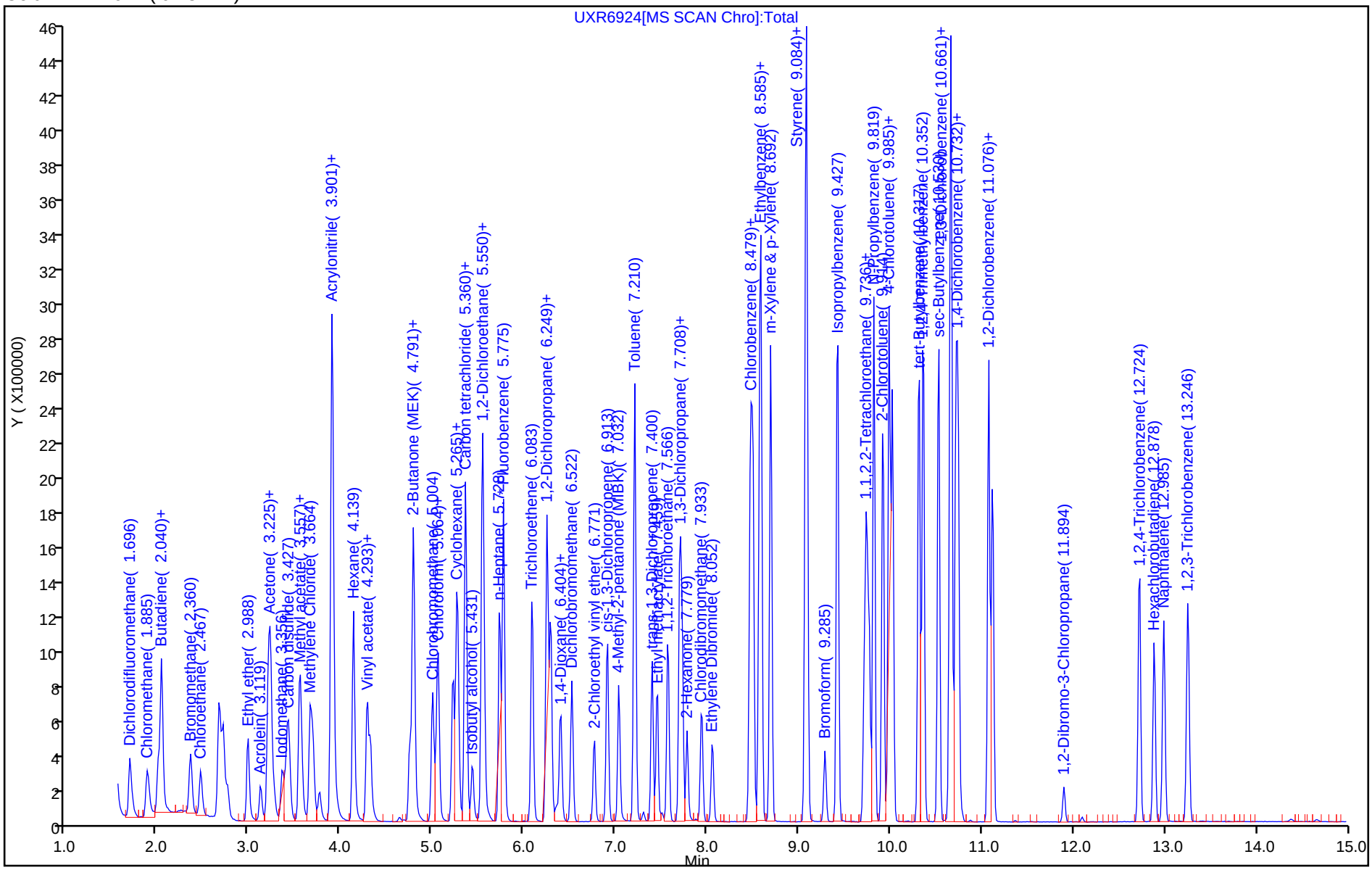
Report Date: 03-Oct-2018 09:29:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6924.D

Injection Date:	02-Oct-2018 14:33:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	ICV			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: CCVIS 240-371223/2 Calibration Date: 03/12/2019 11:53

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6903.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2939	0.2825		0.00961	0.0100	-3.9	50.0
Chloromethane	Ave	0.2643	0.3062	0.1000	0.0116	0.0100	15.8	50.0
Vinyl chloride	Ave	0.2893	0.2637		0.00912	0.0100	-8.8	20.0
Butadiene	Ave	0.3026	0.1884		0.00623	0.0100	-37.7	50.0
Bromomethane	Ave	0.1867	0.1304		0.00699	0.0100	-30.1	50.0
Chloroethane	Ave	0.1894	0.1270		0.00670	0.0100	-33.0	50.0
Dichlorofluoromethane	Ave	0.4442	0.3343		0.00753	0.0100	-24.7	50.0
Trichlorofluoromethane	Ave	0.3768	0.2954		0.00784	0.0100	-21.6	50.0
Ethyl ether	Ave	0.1986	0.2083		0.0105	0.0100	4.9	50.0
Acrolein	Ave	0.0228	0.0285		0.0625	0.0500	25.0	50.0
1,1-Dichloroethene	Ave	0.2432	0.2143		0.00881	0.0100	-11.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1843	0.1562		0.00848	0.0100	-15.2	50.0
Acetone	Lin1		0.0525		0.0183	0.0200	-8.4	50.0
Iodomethane	Ave	0.3597	0.2641		0.00734	0.0100	-26.6	50.0
Carbon disulfide	Ave	0.7146	0.6791		0.00950	0.0100	-5.0	50.0
3-Chloro-1-propene	Ave	0.1449	0.1525		0.0105	0.0100	5.3	50.0
Methyl acetate	Ave	0.1271	0.1464		0.0230	0.0200	15.1	50.0
Methylene Chloride	Ave	0.2529	0.2576		0.0102	0.0100	1.8	50.0
2-Methyl-2-propanol	Lin1		0.0076		0.467	0.100	366.7*	50.0
Acrylonitrile	Ave	0.0694	0.0780		0.112	0.100	12.5	50.0
Methyl tert-butyl ether	Ave	0.6114	0.4739		0.00775	0.0100	-22.5	50.0
trans-1,2-Dichloroethene	Ave	0.2697	0.2329		0.00863	0.0100	-13.7	50.0
Hexane	Ave	0.0738	0.0659		0.00893	0.0100	-10.7	20.0
1,1-Dichloroethane	Ave	0.4441	0.4539	0.1000	0.0102	0.0100	2.2	50.0
Vinyl acetate	Ave	0.3870	0.3749		0.00969	0.0100	-3.1	50.0
2,2-Dichloropropane	Ave	0.0513	0.0406		0.00790	0.0100	-21.0	50.0
cis-1,2-Dichloroethene	Ave	0.2948	0.2607		0.00884	0.0100	-11.6	50.0
2-Butanone (MEK)	Ave	0.0805	0.0807		0.0200	0.0200	0.2	50.0
Chlorobromomethane	Ave	0.1325	0.1054		0.00795	0.0100	-20.5	50.0
Tetrahydrofuran	Ave	0.0469	0.0486		0.0207	0.0200	3.7	50.0
Chloroform	Ave	0.4497	0.4074		0.00906	0.0100	-9.4	20.0
1,1,1-Trichloroethane	Ave	0.3416	0.2851		0.00835	0.0100	-16.5	50.0
Cyclohexane	Ave	0.4081	0.4457		0.0109	0.0100	9.2	50.0
1,1-Dichloropropene	Ave	0.3624	0.3394		0.00936	0.0100	-6.4	50.0
Carbon tetrachloride	Ave	0.3148	0.2536		0.00806	0.0100	-19.4	50.0
Isobutyl alcohol	Ave	0.0058	0.0073		0.315	0.250	26.2	50.0
Benzene	Ave	1.090	1.046		0.00959	0.0100	-4.1	50.0
1,2-Dichloroethane	Ave	0.3592	0.3264		0.00909	0.0100	-9.1	50.0
n-Heptane	Ave	0.0722	0.0554		0.00768	0.0100	-23.2	50.0
Trichloroethene	Ave	0.2857	0.2209		0.00773	0.0100	-22.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: CCVIS 240-371223/2 Calibration Date: 03/12/2019 11:53

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6903.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4404	0.3810		0.00865	0.0100	-13.5	50.0
1,2-Dichloropropane	Ave	0.2558	0.2657		0.0104	0.0100	3.9	20.0
1,4-Dioxane	Ave	0.0022	0.0013		0.122	0.200	-39.2	50.0
Dibromomethane	Ave	0.1493	0.1260		0.00844	0.0100	-15.6	50.0
Dichlorobromomethane	Ave	0.3314	0.2844		0.00858	0.0100	-14.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1376	0.1163		0.0169	0.0200	-15.5	50.0
cis-1,3-Dichloropropene	Ave	0.3689	0.3181		0.00862	0.0100	-13.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1508	0.1494		0.0198	0.0200	-0.9	50.0
Toluene	Ave	1.569	1.602		0.0102	0.0100	2.1	20.0
trans-1,3-Dichloropropene	Ave	0.4240	0.3915		0.00924	0.0100	-7.6	50.0
Ethyl methacrylate	Ave	0.3372	0.3235		0.00959	0.0100	-4.1	50.0
1,1,2-Trichloroethane	Ave	0.2814	0.2736		0.00972	0.0100	-2.8	50.0
Tetrachloroethene	Ave	0.2930	0.2652		0.00905	0.0100	-9.5	50.0
1,3-Dichloropropane	Ave	0.5102	0.5362		0.0105	0.0100	5.1	50.0
2-Hexanone	Ave	0.1307	0.1399		0.0214	0.0200	7.0	50.0
Chlorodibromomethane	Ave	0.3015	0.2480		0.00822	0.0100	-17.8	50.0
Ethylene Dibromide	Ave	0.2703	0.2441		0.00903	0.0100	-9.7	50.0
Chlorobenzene	Ave	1.023	0.9205	0.3000	0.00900	0.0100	-10.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3300	0.2987		0.00905	0.0100	-9.5	50.0
Ethylbenzene	Ave	0.5387	0.5034		0.00935	0.0100	-6.5	20.0
m-Xylene & p-Xylene	Ave	0.6593	0.6340		0.00962	0.0100	-3.8	50.0
o-Xylene	Ave	0.6356	0.5870		0.00924	0.0100	-7.6	50.0
Styrene	Ave	1.079	1.036		0.00960	0.0100	-4.0	50.0
Bromoform	Ave	0.1635	0.1306	0.1000	0.00799	0.0100	-20.1	50.0
Isopropylbenzene	Ave	1.667	1.490		0.00894	0.0100	-10.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6053	0.6059	0.3000	0.0100	0.0100	0.1	50.0
Bromobenzene	Ave	0.7623	0.6615		0.00868	0.0100	-13.2	50.0
1,2,3-Trichloropropane	Ave	0.2099	0.1842		0.00877	0.0100	-12.3	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1648		0.00981	0.0100	-1.9	50.0
N-Propylbenzene	Ave	0.8758	0.7823		0.00893	0.0100	-10.7	50.0
2-Chlorotoluene	Ave	0.7521	0.6560		0.00872	0.0100	-12.8	50.0
1,3,5-Trimethylbenzene	Ave	2.646	2.510		0.00949	0.0100	-5.1	50.0
4-Chlorotoluene	Ave	0.8121	0.7246		0.00892	0.0100	-10.8	50.0
tert-Butylbenzene	Ave	2.251	1.924		0.00855	0.0100	-14.5	50.0
1,2,4-Trimethylbenzene	Ave	2.764	2.629		0.00951	0.0100	-4.9	50.0
sec-Butylbenzene	Ave	3.230	2.822		0.00874	0.0100	-12.6	50.0
1,3-Dichlorobenzene	Ave	1.523	1.348		0.00885	0.0100	-11.5	50.0
4-Isopropyltoluene	Ave	2.782	2.381		0.00856	0.0100	-14.4	50.0
1,4-Dichlorobenzene	Ave	1.586	1.362		0.00859	0.0100	-14.1	50.0
n-Butylbenzene	Ave	2.339	2.016		0.00862	0.0100	-13.8	50.0
1,2-Dichlorobenzene	Ave	1.432	1.284		0.00896	0.0100	-10.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Lab Sample ID: CCVIS 240-371223/2 Calibration Date: 03/12/2019 11:53

Instrument ID: A3UX17 Calib Start Date: 10/02/2018 11:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 14:10

Lab File ID: UXR6903.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0976	0.0695		0.00712	0.0100	-28.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8495	0.5863		0.00690	0.0100	-31.0	50.0
Hexachlorobutadiene	Ave	0.3938	0.2988		0.00759	0.0100	-24.1	50.0
Naphthalene	Ave	1.768	1.133		0.00641	0.0100	-35.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7739	0.6143		0.00794	0.0100	-20.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2330	0.2068		0.00888	0.0100	-11.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2945	0.2871		0.00975	0.0100	-2.5	50.0
Toluene-d8 (Surr)	Ave	1.303	1.356		0.0104	0.0100	4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4856	0.5203		0.0107	0.0100	7.1	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6903.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Mar-2019 11:53:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085092-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Mar-2019 09:41:34 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0304

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1572460	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1060169	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.708	10.708	0.000	96	575802	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	93	325197	10.0	8.88	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.491	0.000	99	451425	10.0	9.75	
$ 6 Toluene-d8 (Surr)	98	7.139	7.139	0.000	93	1437660	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	83	551643	10.0	10.7	
9 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	444280	10.0	9.61	
10 Chloromethane	50	1.874	1.874	0.000	99	481464	10.0	11.6	
11 Vinyl chloride	62	2.004	2.004	0.000	98	414622	10.0	9.12	
119 Butadiene	54	2.040	2.040	0.000	95	296266	10.0	6.23	
12 Bromomethane	94	2.360	2.360	0.000	91	205063	10.0	6.99	
13 Chloroethane	64	2.467	2.467	0.000	100	199648	10.0	6.70	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	525675	10.0	7.53	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	99	464545	10.0	7.84	
16 Ethyl ether	59	2.977	2.977	0.000	94	327503	10.0	10.5	
18 Acrolein	56	3.119	3.119	0.000	100	224052	50.0	62.5	
19 1,1-Dichloroethene	96	3.202	3.202	0.000	96	336940	10.0	8.81	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	94	245641	10.0	8.48	
21 Acetone	43	3.273	3.273	0.000	99	164938	20.0	18.3	
22 Iodomethane	142	3.380	3.380	0.000	98	415243	10.0	7.34	
23 Carbon disulfide	76	3.439	3.439	0.000	99	1067858	10.0	9.50	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	91	239791	10.0	10.5	
26 Methyl acetate	43	3.569	3.569	0.000	98	460294	20.0	23.0	
27 Methylene Chloride	84	3.664	3.664	0.000	97	405014	10.0	10.2	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	84	119592	100.0	466.7	E
29 Acrylonitrile	53	3.890	3.890	0.000	100	1227199	100.0	112.5	
30 Methyl tert-butyl ether	73	3.902	3.902	0.000	95	745214	10.0	7.75	
31 trans-1,2-Dichloroethene	96	3.902	3.902	0.000	95	366153	10.0	8.63	
32 Hexane	86	4.139	4.139	0.000	95	103683	10.0	8.93	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	96	713727	10.0	10.2	
34 Vinyl acetate	43	4.317	4.317	0.000	98	589563	10.0	9.69	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.779	0.012	54	63762	10.0	7.90	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	83	409871	10.0	8.84	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	100	253642	20.0	20.0	
44 Chlorobromomethane	128	4.993	4.993	0.000	95	165681	10.0	7.95	
45 Tetrahydrofuran	42	5.040	5.040	0.000	97	152972	20.0	20.7	
46 Chloroform	83	5.052	5.052	0.000	93	640642	10.0	9.06	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	448346	10.0	8.35	
48 Cyclohexane	56	5.265	5.265	0.000	92	700878	10.0	10.9	
50 Carbon tetrachloride	117	5.360	5.360	0.000	78	398822	10.0	8.06	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	94	533628	10.0	9.36	
51 Isobutyl alcohol	41	5.431	5.431	0.000	88	193962	250.0	315.5	
52 Benzene	78	5.538	5.538	0.000	96	1644101	10.0	9.59	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	513286	10.0	9.09	
55 n-Heptane	100	5.728	5.728	0.000	94	87109	10.0	7.68	
57 Trichloroethene	130	6.083	6.083	0.000	97	347403	10.0	7.73	
59 Methylcyclohexane	83	6.250	6.250	0.000	91	599049	10.0	8.65	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	96	417721	10.0	10.4	
63 1,4-Dioxane	88	6.392	6.392	0.000	36	41113	200.0	121.6	
62 Dibromomethane	93	6.392	6.392	0.000	94	198171	10.0	8.44	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	447188	10.0	8.58	
66 2-Chloroethyl vinyl ether	63	6.759	6.759	0.000	92	365615	20.0	16.9	
67 cis-1,3-Dichloropropene	75	6.902	6.902	0.000	93	500184	10.0	8.62	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	98	469849	20.0	19.8	
69 Toluene	91	7.198	7.198	0.000	98	1697921	10.0	10.2	
70 trans-1,3-Dichloropropene	75	7.388	7.388	0.000	94	415099	10.0	9.24	
71 Ethyl methacrylate	69	7.447	7.447	0.000	91	342925	10.0	9.59	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	92	290103	10.0	9.72	
73 Tetrachloroethene	164	7.696	7.696	0.000	95	281111	10.0	9.05	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	93	568430	10.0	10.5	
76 2-Hexanone	43	7.779	7.779	0.000	97	296561	20.0	21.4	
78 Chlorodibromomethane	129	7.933	7.933	0.000	92	262881	10.0	8.22	
79 Ethylene Dibromide	107	8.052	8.052	0.000	97	258729	10.0	9.03	
81 Chlorobenzene	112	8.491	8.491	0.000	91	975866	10.0	9.00	
82 1,1,1,2-Tetrachloroethane	131	8.562	8.562	0.000	92	316688	10.0	9.05	
83 Ethylbenzene	106	8.586	8.586	0.000	99	533724	10.0	9.35	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	672090	10.0	9.62	
85 o-Xylene	106	9.072	9.072	0.000	97	622322	10.0	9.24	
86 Styrene	104	9.084	9.084	0.000	93	1098284	10.0	9.60	
87 Bromoform	173	9.285	9.285	0.000	95	138489	10.0	7.99	
89 Isopropylbenzene	105	9.416	9.416	0.000	96	1579125	10.0	8.94	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	94	348902	10.0	10.0	
92 Bromobenzene	156	9.736	9.736	0.000	94	380887	10.0	8.68	
94 1,2,3-Trichloropropane	110	9.760	9.760	0.000	83	106045	10.0	8.77	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	68	94892	10.0	9.81	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	450443	10.0	8.93	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	377731	10.0	8.72	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1445305	10.0	9.49	
98 4-Chlorotoluene	126	10.021	10.021	0.000	98	417198	10.0	8.92	
99 tert-Butylbenzene	119	10.305	10.305	0.000	94	1108081	10.0	8.55	
101 1,2,4-Trimethylbenzene	105	10.353	10.353	0.000	94	1513521	10.0	9.51	
102 sec-Butylbenzene	105	10.519	10.519	0.000	94	1624857	10.0	8.74	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	96	775901	10.0	8.85	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	1371258	10.0	8.56	
105 1,4-Dichlorobenzene	146	10.732	10.732	0.000	91	784158	10.0	8.59	
108 n-Butylbenzene	91	11.064	11.064	0.000	98	1160684	10.0	8.62	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	739315	10.0	8.96	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	80	40028	10.0	7.12	
113 1,2,4-Trichlorobenzene	180	12.712	12.712	0.000	94	337609	10.0	6.90	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	95	172051	10.0	7.59	
115 Naphthalene	128	12.985	12.985	0.000	99	652134	10.0	6.41	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	353723	10.0	7.94	
S 130 Xylenes, Total	106				0		20.0	18.9	
S 131 Trihalomethanes, Total	1				0		40.0	33.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMRPRIMW_00325	Amount Added:	8.00	Units: uL	
VMRGAS_00284	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00288	Amount Added:	8.00	Units: uL	
vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00140	Amount Added:	0.00	Units:	Run Reagent

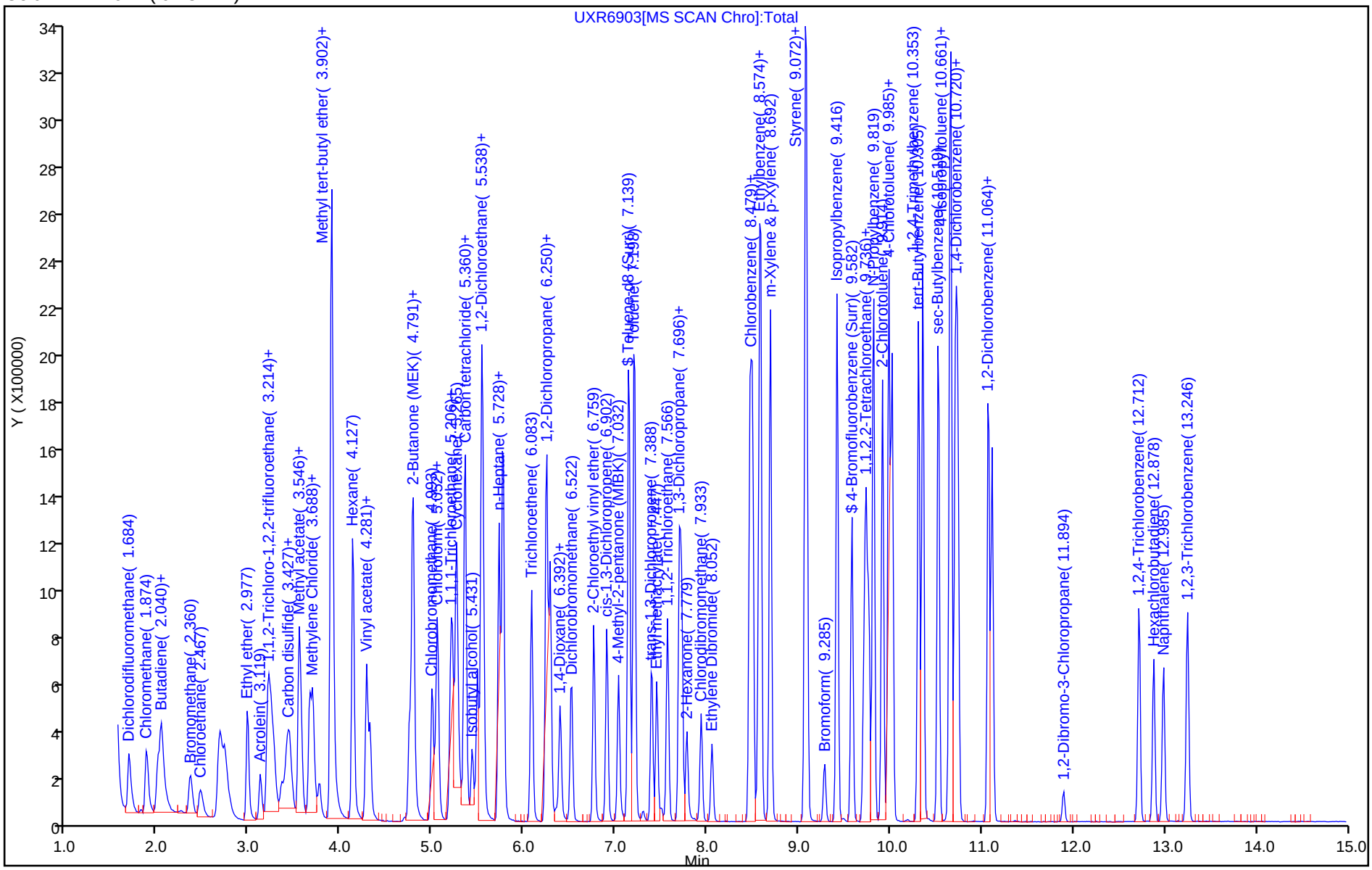
Report Date: 13-Mar-2019 09:41:37 Chrom Revision: 2.3 11-Feb-2019 16:31:10

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6903.D

Injection Date:	12-Mar-2019 11:53:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-348143/8	UXR6923.D
Level 2	STD8260 240-348143/7	UXR6922.D
Level 3	STD8260 240-348143/6	UXR6921.D
Level 4	STD8260 240-348143/5	UXR6920.D
Level 5	STD8260 240-348143/4	UXR6919.D
Level 6	STD8260 240-348143/3	UXR6918.D
Level 7	STD8260 240-348143/2	UXR6917.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2797 0.3059	0.2846 0.2956	0.2808	0.3013	0.3097	Ave		0.2939				4.2		15.0			
Chloromethane	0.2555 0.2780	0.2604 0.2573	0.2535	0.2622	0.2834	Ave		0.2643			0.1000	4.4		15.0			
Vinyl chloride	0.2880 0.2935	0.2981 0.2830	0.2726	0.2958	0.2938	Ave		0.2893				3.1		15.0			
Butadiene	0.3083 0.3091	0.3102 0.2873	0.2841	0.3045	0.3143	Ave		0.3026				3.9		15.0			
Bromomethane	0.2152 0.1797	0.1936 0.1694	0.1757	0.1916	0.1813	Ave		0.1867				8.1		15.0			
Chloroethane	0.2069 0.1870	0.1936 0.1851	0.1705	0.1958	0.1866	Ave		0.1894				5.9		15.0			
Dichlorofluoromethane	0.4927 0.4365	0.4459 0.4274	0.4157	0.4495	0.4419	Ave		0.4442				5.5		15.0			
Trichlorofluoromethane	0.3792 0.3895	0.3548 0.3916	0.3539	0.3836	0.3851	Ave		0.3768				4.2		15.0			
Ethyl ether	0.1950 0.1984	0.2009 0.2035	0.1984	0.1947	0.1996	Ave		0.1986				1.6		15.0			
Acrolein	0.0214 0.0227	0.0217 0.0243	0.0235	0.0232	0.0226	Ave		0.0228				4.4		15.0			
1,1-Dichloroethene	0.2496 0.2413	0.2377 0.2557	0.2437	0.2344	0.2402	Ave		0.2432				3.0		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1762 0.1883	0.1755 0.1909	0.1860	0.1856	0.1878	Ave		0.1843				3.3		15.0			
Acetone	0.0884 0.0555	0.0741 0.0555	0.0630	0.0579	0.0521	Lin1	0.0672	0.0536							0.9980		0.9900
Iodomethane	0.3594 0.3542	0.3717 0.3634	0.3585	0.3584	0.3526	Ave		0.3597				1.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6760 0.7315	0.6928 0.7667	0.7137	0.7028	0.7190	Ave		0.7146				4.1		15.0			
3-Chloro-1-propene	0.1345 0.1516	0.1348 0.1594	0.1412	0.1444	0.1482	Ave		0.1449				6.2		15.0			
Methyl acetate	0.1280 0.1290	0.1278 0.1285	0.1275	0.1239	0.1252	Ave		0.1271				1.5		15.0			
Methylene Chloride	0.2540 0.2452	0.2548 0.2529	0.2583	0.2563	0.2490	Ave		0.2529				1.8		15.0			
Acrylonitrile	0.0663 0.0721	0.0678 0.0737	0.0687	0.0675	0.0696	Ave		0.0694				3.8		15.0			
Methyl tert-butyl ether	0.5605 0.6420	0.6101 0.6344	0.6084	0.5941	0.6305	Ave		0.6114				4.6		15.0			
2-Methyl-2-propanol	0.0010 0.0017	0.0016 0.0016	0.0016	0.0016	0.0015	Lin1	-0.004	0.0016							0.9960		0.9900
trans-1,2-Dichloroethene	0.2756 0.2693	0.2770 0.2750	0.2599	0.2642	0.2671	Ave		0.2697				2.4		15.0			
Hexane	0.0619 0.0796	0.0647 0.0826	0.0771	0.0738	0.0771	Ave		0.0738				10.4		15.0			
1,1-Dichloroethane	0.4163 0.4505	0.4563 0.4644	0.4488	0.4311	0.4417	Ave		0.4441			0.1000	3.6		15.0			
Vinyl acetate	0.3393 0.4163	0.3647 0.4351	0.3839	0.3765	0.3930	Ave		0.3870				8.2		15.0			
2,2-Dichloropropane	0.0538 0.0528	0.0506 0.0485	0.0516	0.0526	0.0495	Ave		0.0513				3.7		15.0			
cis-1,2-Dichloroethene	0.3002 0.2958	0.2929 0.3018	0.2958	0.2909	0.2864	Ave		0.2948				1.8		15.0			
2-Butanone (MEK)	0.0994 0.0790	0.0791 0.0769	0.0767	0.0769	0.0756	Ave		0.0805				10.5		15.0			
Chlorobromomethane	0.1329 0.1330	0.1358 0.1339	0.1312	0.1316	0.1291	Ave		0.1325				1.6		15.0			
Tetrahydrofuran	0.0520 0.0472	0.0465 0.0482	0.0452	0.0431	0.0462	Ave		0.0469				5.9		15.0			
Chloroform	0.4438 0.4467	0.4558 0.4563	0.4537	0.4431	0.4482	Ave		0.4497				1.2		15.0			
1,1,1-Trichloroethane	0.3271 0.3444	0.3408 0.3363	0.3555	0.3483	0.3389	Ave		0.3416				2.7		15.0			
Cyclohexane	0.3585 0.4359	0.3815 0.4503	0.4037	0.4056	0.4212	Ave		0.4081				7.7		15.0			
1,1-Dichloropropene	0.3438 0.3716	0.3611 0.3805	0.3637	0.3545	0.3617	Ave		0.3624				3.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2954 0.3248	0.3078 0.3294	0.3183	0.3118	0.3159	Ave		0.3148				3.6		15.0			
Isobutyl alcohol	0.0052 0.0061	0.0059 0.0056	0.0062	0.0057	0.0058	Ave		0.0058				5.5		15.0			
Benzene	1.0526 1.1136	1.0992 1.1686	1.0723	1.0552	1.0714	Ave		1.0904				3.8		15.0			
1,2-Dichloroethane	0.3626 0.3534	0.3686 0.3553	0.3705	0.3512	0.3529	Ave		0.3592				2.2		15.0			
n-Heptane	0.0614 0.0782	0.0700 0.0820	0.0677	0.0717	0.0741	Ave		0.0722				9.4		15.0			
Trichloroethene	0.2847 0.2868	0.2847 0.2946	0.2886	0.2828	0.2776	Ave		0.2857				1.8		15.0			
Methylcyclohexane	0.3900 0.4694	0.4057 0.4879	0.4520	0.4264	0.4517	Ave		0.4404				7.9		15.0			
1,2-Dichloropropane	0.2546 0.2562	0.2614 0.2609	0.2556	0.2509	0.2509	Ave		0.2558				1.7		15.0			
Dibromomethane	0.1578 0.1464	0.1516 0.1484	0.1490	0.1437	0.1480	Ave		0.1493				3.0		15.0			
1,4-Dioxane	0.0020 0.0023	0.0023 0.0018	0.0020	0.0021	0.0025	Ave		0.0022				10.5		15.0			
Dichlorobromomethane	0.3212 0.3404	0.3280 0.3516	0.3265	0.3231	0.3290	Ave		0.3314				3.3		15.0			
2-Chloroethyl vinyl ether	0.1184 0.1502	0.1287 0.1559	0.1349	0.1314	0.1438	Ave		0.1376				9.5		15.0			
cis-1,3-Dichloropropene	0.3226 0.3984	0.3352 0.4282	0.3574	0.3607	0.3798	Ave		0.3689				9.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1316 0.1616	0.1438 0.1664	0.1493	0.1485	0.1544	Ave		0.1508				7.7		15.0			
Toluene	1.4714 1.6361	1.5251 1.6890	1.5564	1.5279	1.5796	Ave		1.5694				4.7		15.0			
trans-1,3-Dichloropropene	0.3494 0.4712	0.3810 0.4994	0.4082	0.4160	0.4424	Ave		0.4240				12.2		15.0			
Ethyl methacrylate	0.2747 0.3840	0.2900 0.4004	0.3299	0.3244	0.3568	Ave		0.3372				13.8		15.0			
1,1,2-Trichloroethane	0.2745 0.2878	0.2682 0.2881	0.2809	0.2839	0.2864	Ave		0.2814				2.7		15.0			
Tetrachloroethene	0.2816 0.2947	0.2895 0.2990	0.2991	0.2925	0.2946	Ave		0.2930				2.1		15.0			
1,3-Dichloropropane	0.5077 0.5181	0.5055 0.5277	0.5067	0.5010	0.5046	Ave		0.5102				1.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.1125 0.1432	0.1212 0.1474	0.1305	0.1236	0.1368	Ave		0.1307				9.6		15.0			
Chlorodibromomethane	0.2770 0.3228	0.2798 0.3366	0.2945	0.2917	0.3082	Ave		0.3015				7.4		15.0			
Ethylene Dibromide	0.2612 0.2779	0.2522 0.2807	0.2759	0.2707	0.2731	Ave		0.2703				3.7		15.0			
Chlorobenzene	0.9924 1.0416	1.0148 1.0649	1.0234	0.9977	1.0228	Ave		1.0225			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.3159 0.3422	0.3162 0.3514	0.3287	0.3239	0.3317	Ave		0.3300				4.0		15.0			
Ethylbenzene	0.4866 0.5687	0.4988 0.5866	0.5403	0.5326	0.5574	Ave		0.5387				6.7		15.0			
m-Xylene & p-Xylene	0.5856 0.7101	0.6133 0.7256	0.6594	0.6486	0.6725	Ave		0.6593				7.5		15.0			
o-Xylene	0.5439 0.6817	0.5966 0.7079	0.6321	0.6285	0.6586	Ave		0.6356				8.6		15.0			
Styrene	0.9013 1.1893	0.9761 1.2471	1.0546	1.0538	1.1310	Ave		1.0790				11.1		15.0			
Bromoform	0.1351 0.1825	0.1509 0.1943	0.1578	0.1573	0.1665	Ave		0.1635			0.1000	12.1		15.0			
Isopropylbenzene	1.4207 1.8107	1.5202 1.9142	1.6665	1.6252	1.7089	Ave		1.6666				10.0		15.0			
1,1,2,2-Tetrachloroethane	0.5943 0.6284	0.5888 0.6220	0.5907	0.5942	0.6183	Ave		0.6053			0.3000	2.8		15.0			
Bromobenzene	0.7271 0.7935	0.7302 0.7872	0.7502	0.7700	0.7779	Ave		0.7623				3.5		15.0			
1,2,3-Trichloropropane	0.2069 0.2127	0.2032 0.2070	0.2141	0.2115	0.2142	Ave		0.2099				2.0		15.0			
trans-1,4-Dichloro-2-butene	0.1161 0.1719	0.1379 0.1818	0.1329	0.1402	0.1569	Lin1	-0.098	0.1779							0.9960		0.9900
N-Propylbenzene	0.7682 0.9533	0.8046 0.9642	0.8484	0.8756	0.9162	Ave		0.8758				8.4		15.0			
2-Chlorotoluene	0.6788 0.7961	0.7117 0.7944	0.7448	0.7565	0.7822	Ave		0.7521				5.9		15.0			
1,3,5-Trimethylbenzene	2.2852 2.8805	2.4383 2.9688	2.5647	2.6189	2.7664	Ave		2.6461				9.2		15.0			
4-Chlorotoluene	0.7777 0.8431	0.7735 0.8394	0.8179	0.8089	0.8241	Ave		0.8121				3.4		15.0			
tert-Butylbenzene	1.9870 2.4650	2.0325 2.4961	2.1758	2.2355	2.3635	Ave		2.2508				8.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.3972 3.0172	2.5318 3.0826	2.6717	2.7362	2.9097	Ave		2.7638				9.2		15.0			
sec-Butylbenzene	2.7679 3.5590	2.9183 3.5957	3.1532	3.2170	3.3984	Ave		3.2299				9.7		15.0			
1,3-Dichlorobenzene	1.4684 1.5783	1.4757 1.5685	1.4948	1.5172	1.5565	Ave		1.5228				3.0		15.0			
4-Isopropyltoluene	2.3351 3.0957	2.5344 3.0884	2.7039	2.7584	2.9564	Ave		2.7818				10.3		15.0			
1,4-Dichlorobenzene	1.5840 1.6088	1.5783 1.6086	1.5652	1.5550	1.6006	Ave		1.5858				1.3		15.0			
n-Butylbenzene	2.0651 2.6065	2.0758 2.6025	2.2171	2.3291	2.4800	Ave		2.3394				9.9		15.0			
1,2-Dichlorobenzene	1.4157 1.4725	1.3775 1.4559	1.4239	1.4228	1.4591	Ave		1.4325				2.3		15.0			
1,2-Dibromo-3-Chloropropane	0.0923 0.1062	0.0937 0.1047	0.0954	0.0873	0.1033	Ave		0.0976				7.4		15.0			
1,2,4-Trichlorobenzene	0.7796 0.8925	0.8418 0.8506	0.8351	0.8561	0.8909	Ave		0.8495				4.5		15.0			
Hexachlorobutadiene	0.4623 0.3665	0.4164 0.3289	0.3856	0.4022	0.3948	Ave		0.3938				10.5		15.0			
Naphthalene	1.4587 2.0114	1.5675 1.8752	1.7292	1.7558	1.9777	Ave		1.7679				11.6		15.0			
1,2,3-Trichlorobenzene	0.7661 0.7859	0.7691 0.7006	0.7846	0.7814	0.8300	Ave		0.7739				5.0		15.0			
Dibromofluoromethane (Surr)	0.2259 0.2380	0.2362 0.2383	0.2317	0.2299	0.2307	Ave		0.2330				2.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3044 0.2904	0.2986 0.2879	0.3001	0.2927	0.2872	Ave		0.2945				2.2		15.0			
Toluene-d8 (Surr)	1.2307 1.3689	1.2686 1.3897	1.2725	1.2861	1.3039	Ave		1.3029				4.4		15.0			
4-Bromofluorobenzene (Surr)	0.4558 0.5144	0.4823 0.5124	0.4814	0.4694	0.4838	Ave		0.4856				4.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-348143/8	UXR6923.D
Level 2	STD8260 240-348143/7	UXR6922.D
Level 3	STD8260 240-348143/6	UXR6921.D
Level 4	STD8260 240-348143/5	UXR6920.D
Level 5	STD8260 240-348143/4	UXR6919.D
Level 6	STD8260 240-348143/3	UXR6918.D
Level 7	STD8260 240-348143/2	UXR6917.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	46548 1127991	95195 2177976	195941	267466	556831	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloromethane	FB	Ave	42521 1025177	87103 1895607	176907	232791	509634	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl chloride	FB	Ave	47925 1082159	99723 2085250	190220	262653	528340	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Butadiene	FB	Ave	51305 1139635	103762 2117248	198271	270373	565169	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromomethane	FB	Ave	35810 662541	64773 1248338	122606	170116	326060	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloroethane	FB	Ave	34428 689613	64773 1364046	119003	173875	335508	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	81979 1609597	149156 3149367	290055	399090	794579	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	63092 1436295	118692 2885382	246976	340590	692562	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl ether	FB	Ave	32441 731383	67195 1499556	138423	172819	358931	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acrolein	FB	Ave	17815 418655	36315 896339	82106	102903	203603	5.00 100	10.0 200	20.0	25.0	50.0
1,1-Dichloroethene	FB	Ave	41534 889826	79498 1884027	170073	208071	431843	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	29314 694502	58713 1406340	129785	164737	337722	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acetone	FB	Lin1	29434 409535	49590 818130	87981	102722	187418	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Iodomethane	FB	Ave	59797 1305879	124327 2677574	250188	318184	633992	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon disulfide	FB	Ave	112494 2697436	231729 5649144	498011	623966	1292852	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	22385 558852	45088 1174765	98562	128232	266519	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methyl acetate	FB	Ave	42595 951490	85492 1893901	177930	220009	450284	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Methylene Chloride	FB	Ave	42268 904010	85229 1863249	180251	227524	447679	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acrylonitrile	FB	Ave	110259 2658555	226890 5430754	479628	599693	1250988	10.0 200	20.0 400	40.0	50.0	100
Methyl tert-butyl ether	FB	Ave	93266 2367158	204082 4674413	424570	527410	1133709	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Methyl-2-propanol	FB	Lin1	1592 63791	5434 116492	11372	14439	26779	10.0 200	20.0 400	40.0	50.0	100
trans-1,2-Dichloroethene	FB	Ave	45860 992903	92655 2026701	181391	234567	480260	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexane	FB	Ave	10308 293625	21637 608817	53795	65552	138615	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	69275 1661001	152619 3422116	313145	382738	794196	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl acetate	FB	Ave	56457 1534918	121997 3206124	267914	334243	706680	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	8952 194561	16931 357229	36034	46718	89015	1.00 20.0	2.00 40.0	4.00	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	49957 1090576	97963 2223513	206437	258246	515009	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	33082 582874	52944 1133668	107008	136596	271837	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorobromomethane	FB	Ave	22113 490384	45440 986486	91537	116796	232067	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrahydrofuran	FB	Ave	17306 348224	31085 710201	63089	76477	165994	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chloroform	FB	Ave	73848 1647131	152468 3362434	316573	393376	805904	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	54428 1269871	114015 2477899	248094	309219	609345	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Cyclohexane	FB	Ave	59656 1607291	127621 3318089	281684	360084	757466	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	57204 1370250	120789 2803804	253822	314734	650479	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon tetrachloride	FB	Ave	49160 1197815	102962 2427404	222135	276781	568046	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isobutyl alcohol	CBNZ d5	Ave	16523 425833	38121 795057	81129	96768	197645	25.0 500	50.0 1000	100	125	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	175147 4106247	367692 8610775	748233	936816	1926520	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	60342 1303237	123309 2618249	258545	311821	634503	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Heptane	FB	Ave	10221 288221	23430 604280	47274	63688	133265	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichloroethene	FB	Ave	47376 1057492	95245 2170441	201396	251109	499085	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methylcyclohexane	FB	Ave	64893 1730663	135701 3595342	315427	378567	812238	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	42363 944739	87450 1922801	178357	222732	451110	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromomethane	FB	Ave	26256 539695	50725 1093601	103979	127584	266111	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,4-Dioxane	FB	Ave	6776 166869	15055 270728	27865	37939	91137	20.0 400	40.0 800	80.0	100	200
Dichlorobromomethane	FB	Ave	53443 1255247	109708 2590894	227859	286880	591644	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	39419 1107776	86100 2296891	188202	233243	517078	2.00 40.0	4.00 80.0	8.00	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	53678 1469131	112135 3155310	249413	320200	682984	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	43788 1191907	96178 2452127	208315	263674	555233	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Toluene	CBNZ d5	Ave	185749 4574498	391708 9583549	818461	1030009	2147612	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	44112 1317494	97871 2833639	214665	280460	601508	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	34675 1073657	74488 2271778	173471	218670	485134	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	34652 804749	68879 1635004	147698	191366	389343	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	35544 823829	74359 1696590	157266	197164	400504	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	64097 1448480	129835 2994273	266448	337721	686057	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Hexanone	CBNZ d5	Ave	28399 800509	62253 1672725	137216	166649	372100	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorodibromomethane	CBNZ d5	Ave	34965 902395	71862 1910186	154847	196637	419061	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	32979 777078	64787 1592928	145067	182468	371308	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	125274 2912344	260647 6042654	538162	672592	1390557	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	39883 956886	81228 1993762	172855	218339	450940	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	61429 1590057	128105 3328616	284109	359025	757814	1.00 20.0	2.00 40.0	4.00	5.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	73929 1985306	157530 4116998	346755	437253	914240	1.00 20.0	2.00 40.0	4.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	68662 1905966	153236 4016995	332390	423689	895414	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Styrene	CBNZ d5	Ave	113777 3325282	250715 7076177	554571	710364	1537658	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromoform	CBNZ d5	Ave	17050 510274	38748 1102513	82994	106011	226302	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isopropylbenzene	CBNZ d5	Ave	179343 5062607	390467 10861494	876331	1095618	2323341	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	37934 916507	78939 1858286	164568	207969	436392	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	46412 1157238	97898 2351660	208986	269466	549082	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	13206 310136	27240 618277	59659	74009	151189	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	7411 250737	18492 543061	37017	49076	110721	1.00 20.0	2.00 40.0	4.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	49032 1390246	107875 2880312	236351	306437	646688	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	43328 1161063	95424 2373145	207480	264765	552091	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	145860 4200858	326914 8868946	714484	916539	1952614	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	49640 1229565	103712 2507554	227845	283079	581653	1.00 20.0	2.00 40.0	4.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	126831 3594854	272505 7456766	606151	782343	1668265	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	153010 4400235	339444 9208939	744293	957580	2053790	1.00 20.0	2.00 40.0	4.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	176670 5190321	391262 10741834	878432	1125849	2398761	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	93726 2301729	197846 4685790	416423	530973	1098627	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	149045 4514673	339796 9226265	753280	965365	2086778	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-108883-1 Analy Batch No.: 348143

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 11:47 Calibration End Date: 10/02/2018 14:10 Calibration ID: 47192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	101103 2346245	211607 4805677	436044	544219	1129759	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	131815 3801171	278312 7774725	617656	815101	1750464	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	90363 2147486	184691 4349285	396673	497940	1029867	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5892 154950	12569 312716	26585	30565	72922	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	49758 1301523	112860 2541043	232655	299599	628850	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	29506 534519	55831 982461	107434	140744	278632	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Naphthalene	DCBd 4	Ave	93107 2933343	210166 5602024	481731	614460	1395972	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	48902 1146073	103118 2093040	218567	273459	585817	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	37597 877536	79025 1755961	161650	204088	414915	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	50644 1070647	99878 2121278	209434	259873	516415	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	155365 3827267	325828 7885550	669123	867002	1772728	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	57536 1438306	123874 2907557	253135	316440	657697	1.00 20.0	2.00 40.0	4.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6917.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Oct-2018 11:47:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:28:12 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 02-Oct-2018 12:06:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1842151	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	87	1418549	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	94	746851	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.206	-0.012	93	1755961	40.0	40.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.491	-0.001	98	2121278	40.0	39.1	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	-0.001	92	7885550	40.0	42.7	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	2907557	40.0	42.2	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	2177976	40.0	40.2	
10 Chloromethane	50	1.885	1.886	-0.001	99	1895607	40.0	38.9	
11 Vinyl chloride	62	2.004	2.004	0.000	98	2085250	40.0	39.1	
119 Butadiene	54	2.039	2.040	-0.001	89	2117248	40.0	38.0	
12 Bromomethane	94	2.348	2.360	-0.012	90	1248338	40.0	36.3	
13 Chloroethane	64	2.466	2.467	-0.001	99	1364046	40.0	39.1	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	3149367	40.0	38.5	
15 Trichlorofluoromethane	101	2.715	2.716	-0.001	98	2885382	40.0	41.6	
16 Ethyl ether	59	2.976	2.988	-0.012	90	1499556	40.0	41.0	
18 Acrolein	56	3.119	3.119	0.000	99	896339	200.0	213.5	
19 1,1-Dichloroethene	96	3.213	3.214	-0.001	98	1884027	40.0	42.1	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.226	-0.001	92	1406340	40.0	41.4	
21 Acetone	43	3.261	3.273	-0.012	100	818130	80.0	81.6	
22 Iodomethane	142	3.380	3.356	0.024	99	2677574	40.0	40.4	
23 Carbon disulfide	76	3.427	3.427	0.000	99	5649144	40.0	42.9	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	91	1174765	40.0	44.0	
26 Methyl acetate	43	3.569	3.569	0.000	97	1893901	80.0	80.9	
27 Methylene Chloride	84	3.664	3.664	0.000	89	1863249	40.0	40.0	
29 Acrylonitrile	53	3.889	3.902	-0.013	100	5430754	400.0	424.8	
30 Methyl tert-butyl ether	73	3.901	3.902	-0.001	93	4674413	40.0	41.5	
28 2-Methyl-2-propanol	59	3.901	3.913	-0.012	27	116492	400.0	388.4	
31 trans-1,2-Dichloroethene	96	3.901	3.913	-0.012	84	2026701	40.0	40.8	
32 Hexane	86	4.138	4.139	-0.001	89	608817	40.0	44.8	
33 1,1-Dichloroethane	63	4.281	4.293	-0.012	96	3422116	40.0	41.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.316	4.328	-0.012	97	3206124	40.0	45.0	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	80	2223513	40.0	40.9	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	51	357229	40.0	37.8	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	98	1133668	80.0	76.4	
44 Chlorobromomethane	128	5.004	5.004	0.000	89	986486	40.0	40.4	
45 Tetrahydrofuran	42	5.040	5.040	0.000	95	710201	80.0	82.2	
46 Chloroform	83	5.063	5.064	-0.001	92	3362434	40.0	40.6	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	2477899	40.0	39.4	
48 Cyclohexane	56	5.265	5.265	0.000	87	3318089	40.0	44.1	
50 Carbon tetrachloride	117	5.360	5.360	0.000	84	2427404	40.0	41.9	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	97	2803804	40.0	42.0	
51 Isobutyl alcohol	41	5.431	5.431	0.000	94	795057	1000.0	966.4	
52 Benzene	78	5.538	5.550	-0.012	95	8610775	40.0	42.9	
53 1,2-Dichloroethane	62	5.561	5.562	-0.001	98	2618249	40.0	39.6	
55 n-Heptane	100	5.727	5.740	-0.013	89	604280	40.0	45.4	
57 Trichloroethene	130	6.083	6.083	0.000	98	2170441	40.0	41.2	
59 Methylcyclohexane	83	6.249	6.249	0.000	85	3595342	40.0	44.3	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	92	1922801	40.0	40.8	
62 Dibromomethane	93	6.392	6.392	0.000	96	1093601	40.0	39.8	
63 1,4-Dioxane	88	6.392	6.404	-0.012	40	270728	800.0	683.4	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	2590894	40.0	42.4	
66 2-Chloroethyl vinyl ether	63	6.759	6.771	-0.012	92	2296891	80.0	90.6	
67 cis-1,3-Dichloropropene	75	6.901	6.914	-0.013	96	3155310	40.0	46.4	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	95	2452127	80.0	88.3	
69 Toluene	91	7.210	7.210	0.000	98	9583549	40.0	43.0	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	91	2833639	40.0	47.1	
71 Ethyl methacrylate	69	7.447	7.459	-0.012	87	2271778	40.0	47.5	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	90	1635004	40.0	41.0	
73 Tetrachloroethene	164	7.696	7.708	-0.012	97	1696590	40.0	40.8	
75 1,3-Dichloropropane	76	7.720	7.732	-0.012	89	2994273	40.0	41.4	
76 2-Hexanone	43	7.779	7.779	0.000	94	1672725	80.0	90.2	
78 Chlorodibromomethane	129	7.933	7.933	0.000	89	1910186	40.0	44.7	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	1592928	40.0	41.6	
81 Chlorobenzene	112	8.502	8.503	-0.001	96	6042654	40.0	41.7	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	95	1993762	40.0	42.6	
83 Ethylbenzene	106	8.585	8.586	-0.001	98	3328616	40.0	43.6	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	4116998	40.0	44.0	
85 o-Xylene	106	9.072	9.072	0.000	97	4016995	40.0	44.6	
86 Styrene	104	9.083	9.084	-0.001	95	7076177	40.0	46.2	
87 Bromoform	173	9.285	9.285	0.000	97	1102513	40.0	47.5	
89 Isopropylbenzene	105	9.427	9.428	-0.001	94	10861494	40.0	45.9	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	1858286	40.0	41.1	
92 Bromobenzene	156	9.736	9.736	0.000	95	2351660	40.0	41.3	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	69	543061	40.0	41.4	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	80	618277	40.0	39.4	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	2880312	40.0	44.0	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	2373145	40.0	42.3	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	8868946	40.0	44.9	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	2507554	40.0	41.3	
99 tert-Butylbenzene	119	10.317	10.317	0.000	91	7456766	40.0	44.4	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	9208939	40.0	44.6	
102 sec-Butylbenzene	105	10.530	10.530	0.000	93	10741834	40.0	44.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	98	4685790	40.0	41.2	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	9226265	40.0	44.4	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	4805677	40.0	40.6	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	7774725	40.0	44.5	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	4349285	40.0	40.7	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	85	312716	40.0	42.9	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	2541043	40.0	40.1	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	98	982461	40.0	33.4	
115 Naphthalene	128	12.985	12.985	0.000	100	5602024	40.0	42.4	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	98	2093040	40.0	36.2	
S 128 1,2-Dichloroethene, Total	96				0			81.7	
S 129 1,3-Dichloropropene, Total	75				0			93.5	
S 130 Xylenes, Total	106				0		80.0	88.6	
S 131 Trihalomethanes, Total	1				0		160.0	175.2	

Reagents:

VMAROLISTDW_00267	Amount Added:	32.00	Units: uL
VMRPRIMW_00303	Amount Added:	32.00	Units: uL
VMRGAS_00263	Amount Added:	32.00	Units: uL
vm50ss_00337	Amount Added:	32.00	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

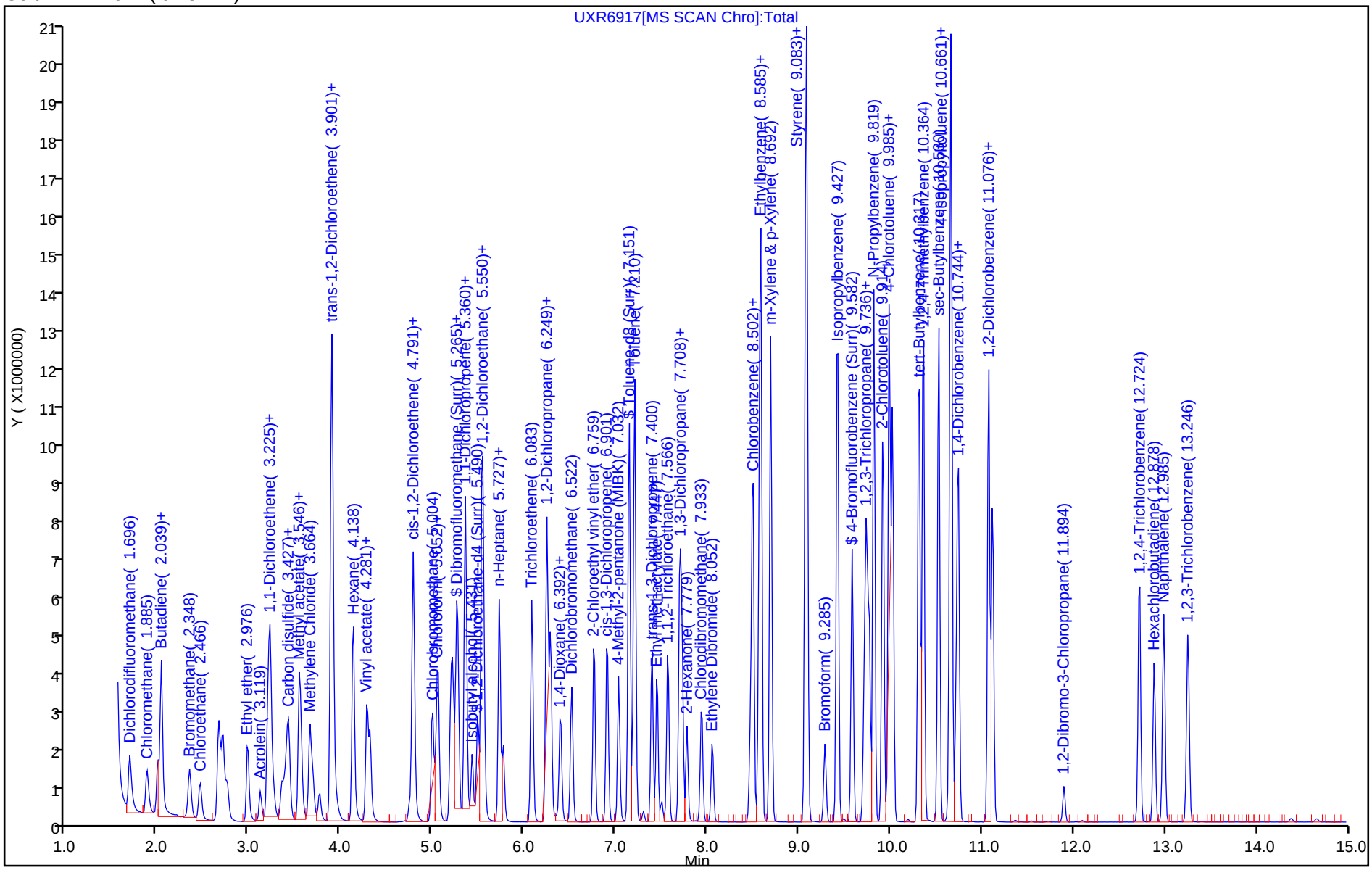
Report Date: 03-Oct-2018 09:28:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6917.D

Injection Date:	02-Oct-2018 11:47:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L7			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6918.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2018 12:10:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-003
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:28:22 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1843657	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	87	1397973	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	94	729181	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	877536	20.0	20.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.491	0.000	98	1070647	20.0	19.7	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	3827267	20.0	21.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	1438306	20.0	21.2	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	1127991	20.0	20.8	
10 Chloromethane	50	1.886	1.886	0.000	99	1025177	20.0	21.0	
11 Vinyl chloride	62	2.016	2.004	0.012	98	1082159	20.0	20.3	
119 Butadiene	54	2.040	2.040	0.000	89	1139635	20.0	20.4	
12 Bromomethane	94	2.360	2.360	0.000	90	662541	20.0	19.3	
13 Chloroethane	64	2.467	2.467	0.000	99	689613	20.0	19.8	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	96	1609597	20.0	19.7	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	1436295	20.0	20.7	
16 Ethyl ether	59	2.988	2.988	0.000	89	731383	20.0	20.0	
18 Acrolein	56	3.119	3.119	0.000	99	418655	100.0	99.6	
19 1,1-Dichloroethene	96	3.226	3.214	0.012	98	889826	20.0	19.8	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	92	694502	20.0	20.4	
21 Acetone	43	3.273	3.273	0.000	100	409535	40.0	40.2	
22 Iodomethane	142	3.380	3.356	0.024	99	1305879	20.0	19.7	
23 Carbon disulfide	76	3.427	3.427	0.000	99	2697436	20.0	20.5	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	91	558852	20.0	20.9	
26 Methyl acetate	43	3.569	3.569	0.000	97	951490	40.0	40.6	
27 Methylene Chloride	84	3.664	3.664	0.000	90	904010	20.0	19.4	
30 Methyl tert-butyl ether	73	3.902	3.902	0.000	96	2367158	20.0	21.0	
29 Acrylonitrile	53	3.902	3.902	0.000	99	2658555	200.0	207.8	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	94	992903	20.0	20.0	
28 2-Methyl-2-propanol	59	3.913	3.913	0.000	26	63791	200.0	213.6	
32 Hexane	86	4.139	4.139	0.000	90	293625	20.0	21.6	
33 1,1-Dichloroethane	63	4.281	4.293	-0.012	96	1661001	20.0	20.3	
34 Vinyl acetate	43	4.317	4.328	-0.011	97	1534918	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	194561	20.0	20.6	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	81	1090576	20.0	20.1	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	98	582874	40.0	39.3	
44 Chlorobromomethane	128	5.004	5.004	0.000	92	490384	20.0	20.1	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	348224	40.0	40.3	
46 Chloroform	83	5.064	5.064	0.000	92	1647131	20.0	19.9	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	1269871	20.0	20.2	
48 Cyclohexane	56	5.265	5.265	0.000	88	1607291	20.0	21.4	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	96	1370250	20.0	20.5	
50 Carbon tetrachloride	117	5.360	5.360	0.000	96	1197815	20.0	20.6	
51 Isobutyl alcohol	41	5.431	5.431	0.000	94	425833	500.0	525.2	
52 Benzene	78	5.538	5.550	-0.012	95	4106247	20.0	20.4	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	1303237	20.0	19.7	
55 n-Heptane	100	5.728	5.740	-0.012	90	288221	20.0	21.7	
57 Trichloroethene	130	6.083	6.083	0.000	98	1057492	20.0	20.1	
59 Methylcyclohexane	83	6.249	6.249	0.000	86	1730663	20.0	21.3	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	94	944739	20.0	20.0	
62 Dibromomethane	93	6.392	6.392	0.000	96	539695	20.0	19.6	
63 1,4-Dioxane	88	6.404	6.404	0.000	43	166869	400.0	420.9	
64 Dichlorobromomethane	83	6.522	6.522	0.000	100	1255247	20.0	20.5	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	1107776	40.0	43.7	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	96	1469131	20.0	21.6	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	95	1191907	40.0	42.9	
69 Toluene	91	7.210	7.210	0.000	98	4574498	20.0	20.9	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	92	1317494	20.0	22.2	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	1073657	20.0	22.8	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	91	804749	20.0	20.5	
73 Tetrachloroethene	164	7.708	7.708	0.000	97	823829	20.0	20.1	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	88	1448480	20.0	20.3	
76 2-Hexanone	43	7.779	7.779	0.000	94	800509	40.0	43.8	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	902395	20.0	21.4	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	777078	20.0	20.6	
81 Chlorobenzene	112	8.503	8.503	0.000	96	2912344	20.0	20.4	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	94	956886	20.0	20.7	
83 Ethylbenzene	106	8.586	8.586	0.000	98	1590057	20.0	21.1	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	1985306	20.0	21.5	
85 o-Xylene	106	9.072	9.072	0.000	95	1905966	20.0	21.4	
86 Styrene	104	9.084	9.084	0.000	94	3325282	20.0	22.0	
87 Bromoform	173	9.285	9.285	0.000	96	510274	20.0	22.3	
89 Isopropylbenzene	105	9.416	9.428	-0.012	95	5062607	20.0	21.7	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	916507	20.0	20.8	
92 Bromobenzene	156	9.736	9.736	0.000	95	1157238	20.0	20.8	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	81	310136	20.0	20.3	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	68	250737	20.0	19.9	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	1390246	20.0	21.8	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	1161063	20.0	21.2	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	4200858	20.0	21.8	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	1229565	20.0	20.8	
99 tert-Butylbenzene	119	10.317	10.317	0.000	91	3594854	20.0	21.9	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	4400235	20.0	21.8	
102 sec-Butylbenzene	105	10.530	10.530	0.000	93	5190321	20.0	22.0	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	4514673	20.0	22.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	97	2301729	20.0	20.7	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	2346245	20.0	20.3	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	3801171	20.0	22.3	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	2147486	20.0	20.6	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	85	154950	20.0	21.8	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	1301523	20.0	21.0	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	97	534519	20.0	18.6	
115 Naphthalene	128	12.985	12.985	0.000	100	2933343	20.0	22.8	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	1146073	20.0	20.3	
S 128 1,2-Dichloroethene, Total	96				0			40.0	
S 129 1,3-Dichloropropene, Total	75				0			43.8	
S 130 Xylenes, Total	106				0		40.0	43.0	
S 131 Trihalomethanes, Total	1				0		80.0	84.2	

Reagents:

VMAROLISTDW_00267	Amount Added:	16.00	Units: uL
VMRPRIMW_00303	Amount Added:	16.00	Units: uL
VMRGAS_00263	Amount Added:	16.00	Units: uL
vm50ss_00337	Amount Added:	16.00	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

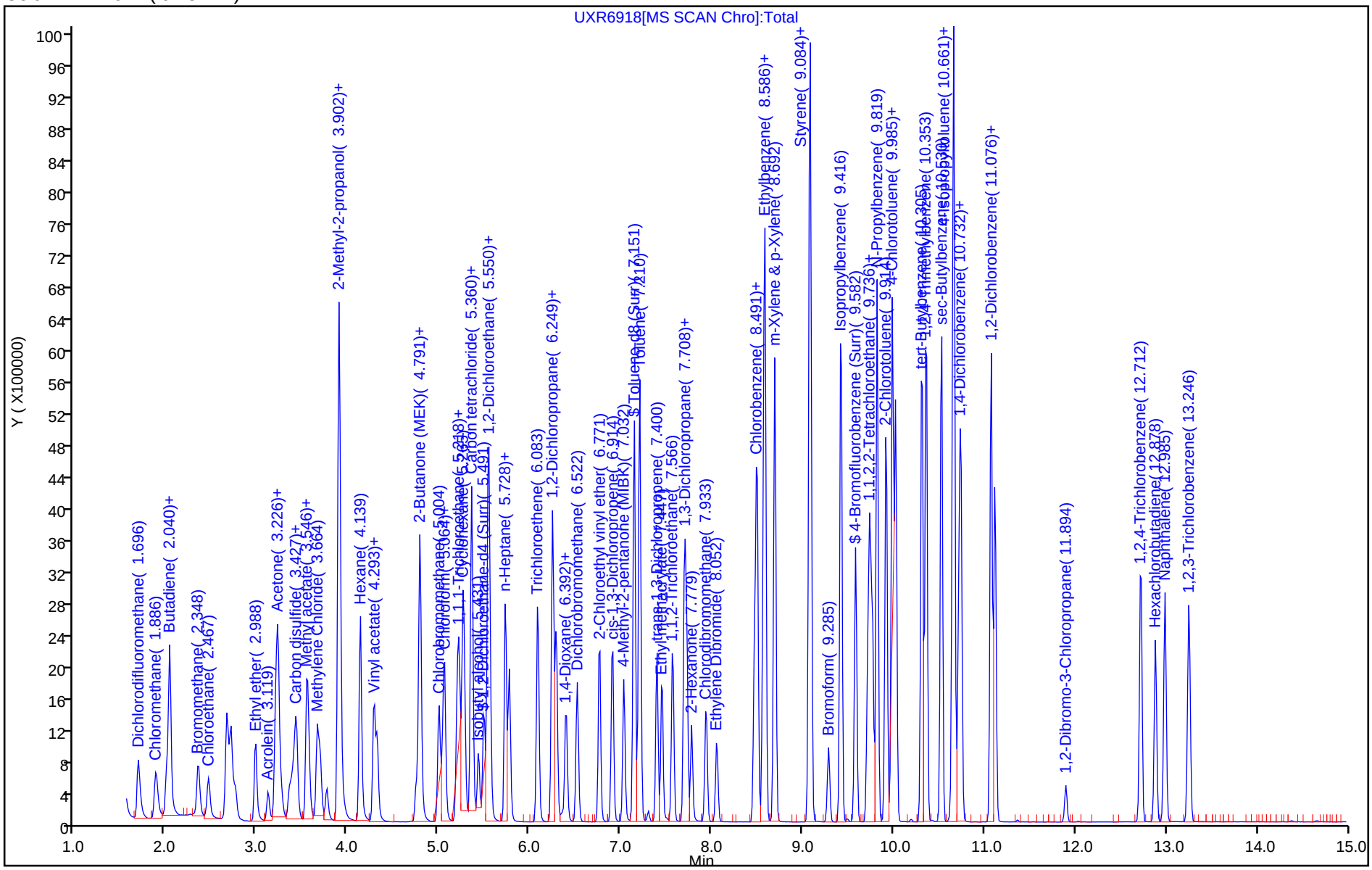
Report Date: 03-Oct-2018 09:28:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6918.D

Injection Date:	02-Oct-2018 12:10:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L6			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6919.D
Lims ID: STD8260 L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 02-Oct-2018 12:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-004
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:28:34 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1798169	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1359565	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	94	705844	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	414915	10.0	9.90	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	97	516415	10.0	9.75	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	1772728	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	657697	10.0	9.96	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	556831	10.0	10.5	
10 Chloromethane	50	1.886	1.886	0.000	99	509634	10.0	10.7	
11 Vinyl chloride	62	2.016	2.016	0.000	98	528340	10.0	10.2	
119 Butadiene	54	2.040	2.040	0.000	89	565169	10.0	10.4	
12 Bromomethane	94	2.360	2.360	0.000	90	326060	10.0	9.71	
13 Chloroethane	64	2.467	2.467	0.000	99	335508	10.0	9.85	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	794579	10.0	9.95	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	692562	10.0	10.2	
16 Ethyl ether	59	2.988	2.988	0.000	90	358931	10.0	10.0	
18 Acrolein	56	3.119	3.119	0.000	99	203603	50.0	49.7	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	98	431843	10.0	9.87	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	92	337722	10.0	10.2	
21 Acetone	43	3.273	3.273	0.000	100	187418	20.0	18.2	
22 Iodomethane	142	3.392	3.392	0.000	99	633992	10.0	9.80	
23 Carbon disulfide	76	3.427	3.427	0.000	99	1292852	10.0	10.1	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	266519	10.0	10.2	
26 Methyl acetate	43	3.569	3.569	0.000	97	450284	20.0	19.7	
27 Methylene Chloride	84	3.664	3.664	0.000	89	447679	10.0	9.84	
29 Acrylonitrile	53	3.901	3.901	0.000	99	1250988	100.0	100.3	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	97	1133709	10.0	10.3	
28 2-Methyl-2-propanol	59	3.901	3.901	0.000	26	26779	100.0	93.3	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	99	480260	10.0	9.90	
32 Hexane	86	4.139	4.139	0.000	91	138615	10.0	10.4	
33 1,1-Dichloroethane	63	4.293	4.293	0.000	96	794196	10.0	9.94	
34 Vinyl acetate	43	4.328	4.328	0.000	97	706680	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	80	515009	10.0	9.71	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	89015	10.0	9.64	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	271837	20.0	18.8	
44 Chlorobromomethane	128	5.004	5.004	0.000	92	232067	10.0	9.74	
45 Tetrahydrofuran	42	5.040	5.040	0.000	95	165994	20.0	19.7	
46 Chloroform	83	5.064	5.064	0.000	92	805904	10.0	9.97	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	609345	10.0	9.92	
48 Cyclohexane	56	5.265	5.265	0.000	88	757466	10.0	10.3	
50 Carbon tetrachloride	117	5.360	5.360	0.000	85	568046	10.0	10.0	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	95	650479	10.0	9.98	
51 Isobutyl alcohol	41	5.431	5.431	0.000	94	197645	250.0	250.7	
52 Benzene	78	5.550	5.550	0.000	95	1926520	10.0	9.83	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	634503	10.0	9.82	
55 n-Heptane	100	5.728	5.728	0.000	89	133265	10.0	10.3	
57 Trichloroethene	130	6.083	6.083	0.000	98	499085	10.0	9.72	
59 Methylcyclohexane	83	6.249	6.249	0.000	88	812238	10.0	10.3	
60 1,2-Dichloropropane	63	6.297	6.297	0.000	93	451110	10.0	9.81	
62 Dibromomethane	93	6.392	6.392	0.000	96	266111	10.0	9.91	
63 1,4-Dioxane	88	6.404	6.404	0.000	43	91137	200.0	235.7	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	591644	10.0	9.93	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	517078	20.0	20.9	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	96	682984	10.0	10.3	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	96	555233	20.0	20.5	
69 Toluene	91	7.210	7.210	0.000	98	2147612	10.0	10.1	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	92	601508	10.0	10.4	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	485134	10.0	10.6	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	92	389343	10.0	10.2	
73 Tetrachloroethene	164	7.708	7.708	0.000	97	400504	10.0	10.1	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	89	686057	10.0	9.89	
76 2-Hexanone	43	7.779	7.779	0.000	95	372100	20.0	20.9	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	419061	10.0	10.2	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	371308	10.0	10.1	
81 Chlorobenzene	112	8.503	8.503	0.000	97	1390557	10.0	10.0	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	94	450940	10.0	10.1	
83 Ethylbenzene	106	8.586	8.586	0.000	98	757814	10.0	10.3	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	914240	10.0	10.2	
85 o-Xylene	106	9.072	9.072	0.000	95	895414	10.0	10.4	
86 Styrene	104	9.084	9.084	0.000	95	1537658	10.0	10.5	
87 Bromoform	173	9.285	9.285	0.000	96	226302	10.0	10.2	
89 Isopropylbenzene	105	9.428	9.428	0.000	95	2323341	10.0	10.3	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	436392	10.0	10.2	
92 Bromobenzene	156	9.736	9.736	0.000	95	549082	10.0	10.2	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	67	110721	10.0	9.37	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	82	151189	10.0	10.2	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	646688	10.0	10.5	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	552091	10.0	10.4	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1952614	10.0	10.5	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	581653	10.0	10.1	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	1668265	10.0	10.5	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	2053790	10.0	10.5	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	2398761	10.0	10.5	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	1098627	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	2086778	10.0	10.6	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	1129759	10.0	10.1	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	1750464	10.0	10.6	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	1029867	10.0	10.2	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	85	72922	10.0	10.6	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	628850	10.0	10.5	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	98	278632	10.0	10.0	
115 Naphthalene	128	12.985	12.985	0.000	100	1395972	10.0	11.2	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	585817	10.0	10.7	
S 130 Xylenes, Total	106				0		20.0	20.6	
S 131 Trihalomethanes, Total	1				0		40.0	40.3	

Reagents:

VMAROLISTDW_00267	Amount Added:	8.00	Units: uL
VMRPRIMW_00303	Amount Added:	8.00	Units: uL
VMRGAS_00263	Amount Added:	8.00	Units: uL
vm50ss_00337	Amount Added:	8.00	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

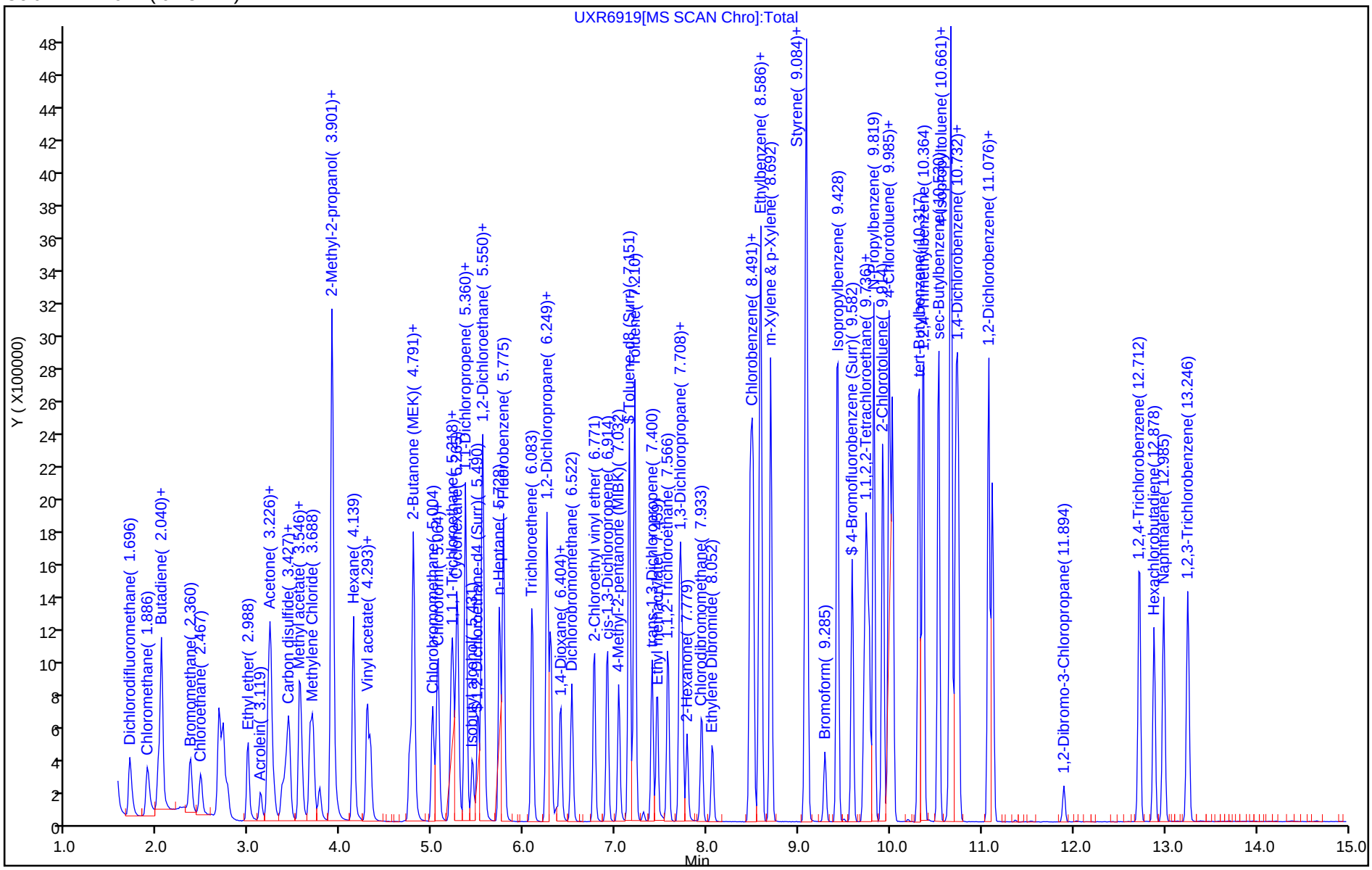
Report Date: 03-Oct-2018 09:28:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6919.D

Injection Date:	02-Oct-2018 12:34:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6920.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2018 12:58:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-005
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:28:44 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1775632	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	86	1348248	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	94	699939	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	204088	5.00	4.93	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.491	0.000	99	259873	5.00	4.97	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	867002	5.00	4.94	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	316440	5.00	4.83	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	267466	5.00	5.12	
10 Chloromethane	50	1.886	1.886	0.000	99	232791	5.00	4.96	
11 Vinyl chloride	62	2.004	2.004	0.000	98	262653	5.00	5.11	
119 Butadiene	54	2.040	2.040	0.000	90	270373	5.00	5.03	
12 Bromomethane	94	2.360	2.360	0.000	91	170116	5.00	5.13	
13 Chloroethane	64	2.467	2.467	0.000	99	173875	5.00	5.17	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	96	399090	5.00	5.06	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	340590	5.00	5.09	
16 Ethyl ether	59	2.988	2.988	0.000	89	172819	5.00	4.90	
18 Acrolein	56	3.119	3.119	0.000	99	102903	25.0	25.4	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	98	208071	5.00	4.82	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	91	164737	5.00	5.03	
21 Acetone	43	3.273	3.273	0.000	100	102722	10.0	9.54	
22 Iodomethane	142	3.356	3.356	0.000	99	318184	5.00	4.98	
23 Carbon disulfide	76	3.427	3.427	0.000	99	623966	5.00	4.92	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	128232	5.00	4.98	
26 Methyl acetate	43	3.569	3.569	0.000	97	220009	10.0	9.75	
27 Methylene Chloride	84	3.664	3.664	0.000	90	227524	5.00	5.07	
30 Methyl tert-butyl ether	73	3.902	3.902	0.000	94	527410	5.00	4.86	
29 Acrylonitrile	53	3.902	3.902	0.000	98	599693	50.0	48.7	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	98	234567	5.00	4.90	
28 2-Methyl-2-propanol	59	3.913	3.913	0.000	27	14439	50.0	52.0	
32 Hexane	86	4.139	4.139	0.000	91	65552	5.00	5.00	
33 1,1-Dichloroethane	63	4.293	4.293	0.000	96	382738	5.00	4.85	
34 Vinyl acetate	43	4.328	4.328	0.000	97	334243	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	52	46718	5.00	5.12	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	80	258246	5.00	4.93	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	100	136596	10.0	9.55	
44 Chlorobromomethane	128	5.004	5.004	0.000	92	116796	5.00	4.96	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	76477	10.0	9.18	
46 Chloroform	83	5.064	5.064	0.000	92	393376	5.00	4.93	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	309219	5.00	5.10	
48 Cyclohexane	56	5.265	5.265	0.000	88	360084	5.00	4.97	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	95	314734	5.00	4.89	
50 Carbon tetrachloride	117	5.360	5.360	0.000	85	276781	5.00	4.95	
51 Isobutyl alcohol	41	5.431	5.431	0.000	93	96768	125.0	123.8	
52 Benzene	78	5.550	5.550	0.000	95	936816	5.00	4.84	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	311821	5.00	4.89	
55 n-Heptane	100	5.740	5.740	0.000	89	63688	5.00	4.97	
57 Trichloroethene	130	6.083	6.083	0.000	97	251109	5.00	4.95	
59 Methylcyclohexane	83	6.249	6.249	0.000	88	378567	5.00	4.84	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	222732	5.00	4.90	
62 Dibromomethane	93	6.392	6.392	0.000	95	127584	5.00	4.81	
63 1,4-Dioxane	88	6.404	6.404	0.000	42	37939	100.0	99.4	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	286880	5.00	4.88	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	93	233243	10.0	9.55	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	95	320200	5.00	4.89	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	96	263674	10.0	9.85	
69 Toluene	91	7.210	7.210	0.000	99	1030009	5.00	4.87	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	92	280460	5.00	4.91	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	218670	5.00	4.81	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	90	191366	5.00	5.04	
73 Tetrachloroethene	164	7.708	7.708	0.000	98	197164	5.00	4.99	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	89	337721	5.00	4.91	
76 2-Hexanone	43	7.779	7.779	0.000	94	166649	10.0	9.45	
78 Chlorodibromomethane	129	7.933	7.933	0.000	89	196637	5.00	4.84	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	182468	5.00	5.01	
81 Chlorobenzene	112	8.503	8.503	0.000	95	672592	5.00	4.88	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	94	218339	5.00	4.91	
83 Ethylbenzene	106	8.586	8.586	0.000	98	359025	5.00	4.94	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	437253	5.00	4.92	
85 o-Xylene	106	9.072	9.072	0.000	97	423689	5.00	4.94	
86 Styrene	104	9.084	9.084	0.000	94	710364	5.00	4.88	
87 Bromoform	173	9.285	9.285	0.000	96	106011	5.00	4.81	
89 Isopropylbenzene	105	9.428	9.428	0.000	95	1095618	5.00	4.88	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	207969	5.00	4.91	
92 Bromobenzene	156	9.736	9.736	0.000	94	269466	5.00	5.05	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	82	74009	5.00	5.04	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	66	49076	5.00	4.49	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	306437	5.00	5.00	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	264765	5.00	5.03	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	916539	5.00	4.95	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	283079	5.00	4.98	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	782343	5.00	4.97	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	957580	5.00	4.95	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	1125849	5.00	4.98	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	965365	5.00	4.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.661	10.661	0.000	98	530973	5.00	4.98	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	94	544219	5.00	4.90	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	815101	5.00	4.98	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	497940	5.00	4.97	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	81	30565	5.00	4.48	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	93	299599	5.00	5.04	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	98	140744	5.00	5.11	
115 Naphthalene	128	12.985	12.985	0.000	100	614460	5.00	4.97	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	273459	5.00	5.05	
S 128 1,2-Dichloroethene, Total	96				0			9.83	
S 129 1,3-Dichloropropene, Total	75				0			9.79	
S 130 Xylenes, Total	106				0		10.0	9.86	
S 131 Trihalomethanes, Total	1				0		20.0	19.4	

Reagents:

VMAROLISTDW_00267	Amount Added:	4.00	Units: uL
VMRPRIMW_00303	Amount Added:	4.00	Units: uL
VMRGAS_00263	Amount Added:	4.00	Units: uL
vm50ss_00337	Amount Added:	4.00	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

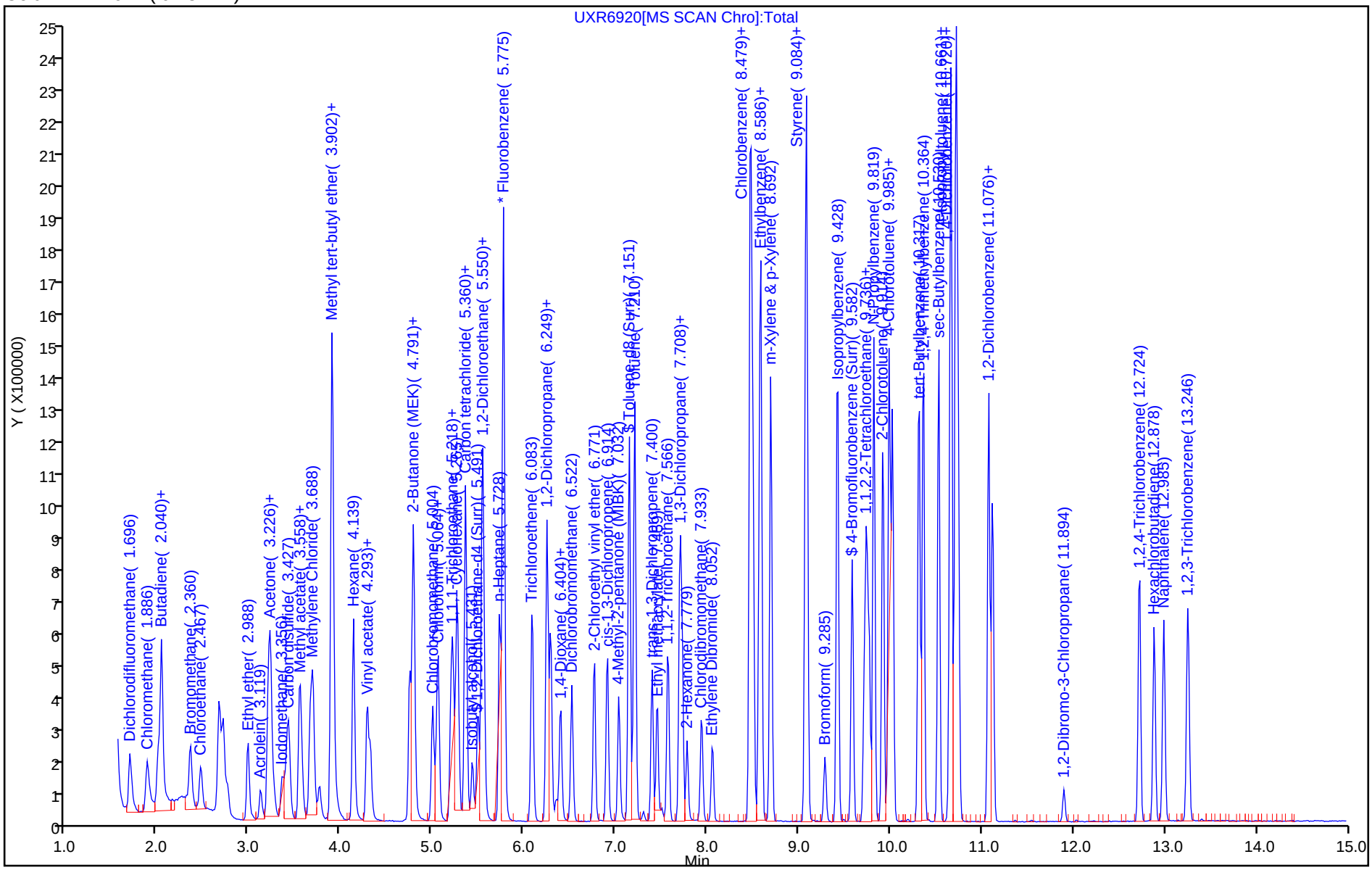
Report Date: 03-Oct-2018 09:28:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6920.D

Injection Date:	02-Oct-2018 12:58:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6921.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2018 13:22:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-006
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:28:54 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1744492	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	86	1314628	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	696471	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.206	-0.012	94	161650	4.00	3.98	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.502	5.491	0.011	98	209434	4.00	4.08	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	669123	4.00	3.91	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	253135	4.00	3.96	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	195941	4.00	3.82	
10 Chloromethane	50	1.886	1.886	0.000	99	176907	4.00	3.84	
11 Vinyl chloride	62	2.016	2.004	0.012	97	190220	4.00	3.77	
119 Butadiene	54	2.040	2.040	0.000	89	198271	4.00	3.76	
12 Bromomethane	94	2.360	2.360	0.000	91	122606	4.00	3.77	
13 Chloroethane	64	2.467	2.467	0.000	99	119003	4.00	3.60	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	290055	4.00	3.74	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	99	246976	4.00	3.76	
16 Ethyl ether	59	2.988	2.988	0.000	89	138423	4.00	4.00	
18 Acrolein	56	3.119	3.119	0.000	97	82106	20.0	20.7	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	98	170073	4.00	4.01	
20 1,1,2-Trichloro-1,2,2-trif	151	3.238	3.226	0.012	92	129785	4.00	4.04	
21 Acetone	43	3.273	3.273	0.000	100	87981	8.00	8.16	
22 Iodomethane	142	3.356	3.356	0.000	99	250188	4.00	3.99	
23 Carbon disulfide	76	3.427	3.427	0.000	100	498011	4.00	3.99	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	98562	4.00	3.90	
26 Methyl acetate	43	3.570	3.569	0.001	97	177930	8.00	8.02	
27 Methylene Chloride	84	3.664	3.664	0.000	88	180251	4.00	4.09	
30 Methyl tert-butyl ether	73	3.902	3.902	0.000	94	424570	4.00	3.98	
28 2-Methyl-2-propanol	59	3.902	3.913	-0.011	27	11372	40.0	42.2	
29 Acrylonitrile	53	3.902	3.902	0.000	98	479628	40.0	39.6	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	97	181391	4.00	3.85	
32 Hexane	86	4.139	4.139	0.000	92	53795	4.00	4.18	
33 1,1-Dichloroethane	63	4.293	4.293	0.000	97	313145	4.00	4.04	
34 Vinyl acetate	43	4.328	4.328	0.000	97	267914	4.00	3.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	81	206437	4.00	4.01	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	54	36034	4.00	4.02	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	107008	8.00	7.62	
44 Chlorobromomethane	128	5.004	5.004	0.000	94	91537	4.00	3.96	
45 Tetrahydrofuran	42	5.040	5.040	0.000	95	63089	8.00	7.71	
46 Chloroform	83	5.064	5.064	0.000	92	316573	4.00	4.04	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	248094	4.00	4.16	
48 Cyclohexane	56	5.265	5.265	0.000	88	281684	4.00	3.96	
50 Carbon tetrachloride	117	5.360	5.360	0.000	87	222135	4.00	4.05	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	95	253822	4.00	4.01	
51 Isobutyl alcohol	41	5.431	5.431	0.000	92	81129	100.0	106.4	
52 Benzene	78	5.550	5.550	0.000	95	748233	4.00	3.93	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	258545	4.00	4.13	
55 n-Heptane	100	5.728	5.740	-0.012	88	47274	4.00	3.75	
57 Trichloroethene	130	6.084	6.083	0.001	98	201396	4.00	4.04	
59 Methylcyclohexane	83	6.250	6.249	0.001	87	315427	4.00	4.11	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	92	178357	4.00	4.00	
62 Dibromomethane	93	6.392	6.392	0.000	95	103979	4.00	3.99	
63 1,4-Dioxane	88	6.392	6.404	-0.012	41	27865	80.0	74.3	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	227859	4.00	3.94	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	188202	8.00	7.84	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	95	249413	4.00	3.88	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	95	208315	8.00	7.92	
69 Toluene	91	7.210	7.210	0.000	98	818461	4.00	3.97	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	94	214665	4.00	3.85	
71 Ethyl methacrylate	69	7.447	7.459	-0.012	89	173471	4.00	3.91	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	92	147698	4.00	3.99	
73 Tetrachloroethene	164	7.696	7.708	-0.012	95	157266	4.00	4.08	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	90	266448	4.00	3.97	
76 2-Hexanone	43	7.779	7.779	0.000	94	137216	8.00	7.98	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	154847	4.00	3.91	
79 Ethylene Dibromide	107	8.052	8.052	0.000	97	145067	4.00	4.08	
81 Chlorobenzene	112	8.503	8.503	0.000	95	538162	4.00	4.00	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	93	172855	4.00	3.98	
83 Ethylbenzene	106	8.586	8.586	0.000	98	284109	4.00	4.01	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	346755	4.00	4.00	
85 o-Xylene	106	9.072	9.072	0.000	94	332390	4.00	3.98	
86 Styrene	104	9.084	9.084	0.000	93	554571	4.00	3.91	
87 Bromoform	173	9.285	9.285	0.000	95	82994	4.00	3.86	
89 Isopropylbenzene	105	9.428	9.428	0.000	95	876331	4.00	4.00	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	94	164568	4.00	3.90	
92 Bromobenzene	156	9.736	9.736	0.000	95	208986	4.00	3.94	
93 trans-1,4-Dichloro-2-buten	53	9.772	9.771	0.001	66	37017	4.00	3.54	
94 1,2,3-Trichloropropane	110	9.772	9.771	0.001	82	59659	4.00	4.08	
95 N-Propylbenzene	120	9.819	9.819	0.000	98	236351	4.00	3.87	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	207480	4.00	3.96	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	714484	4.00	3.88	
98 4-Chlorotoluene	126	10.021	10.020	0.001	98	227845	4.00	4.03	
99 tert-Butylbenzene	119	10.317	10.317	0.000	91	606151	4.00	3.87	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	744293	4.00	3.87	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	878432	4.00	3.90	
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	97	416423	4.00	3.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	753280	4.00	3.89	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	436044	4.00	3.95	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	617656	4.00	3.79	
109 1,2-Dichlorobenzene	146	11.112	11.111	0.001	97	396673	4.00	3.98	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	83	26585	4.00	3.91	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	232655	4.00	3.93	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	98	107434	4.00	3.92	
115 Naphthalene	128	12.985	12.985	0.000	100	481731	4.00	3.91	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	218567	4.00	4.05	
S 128 1,2-Dichloroethene, Total	96				0			7.87	
S 129 1,3-Dichloropropene, Total	75				0			7.73	
S 130 Xylenes, Total	106				0		8.00	7.98	
S 131 Trihalomethanes, Total	1				0		16.0	15.7	

Reagents:

VMAROLISTDW_00267	Amount Added:	3.20	Units: uL
VMRPRIMW_00303	Amount Added:	3.20	Units: uL
VMRGAS_00263	Amount Added:	3.20	Units: uL
vm50ss_00337	Amount Added:	3.20	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

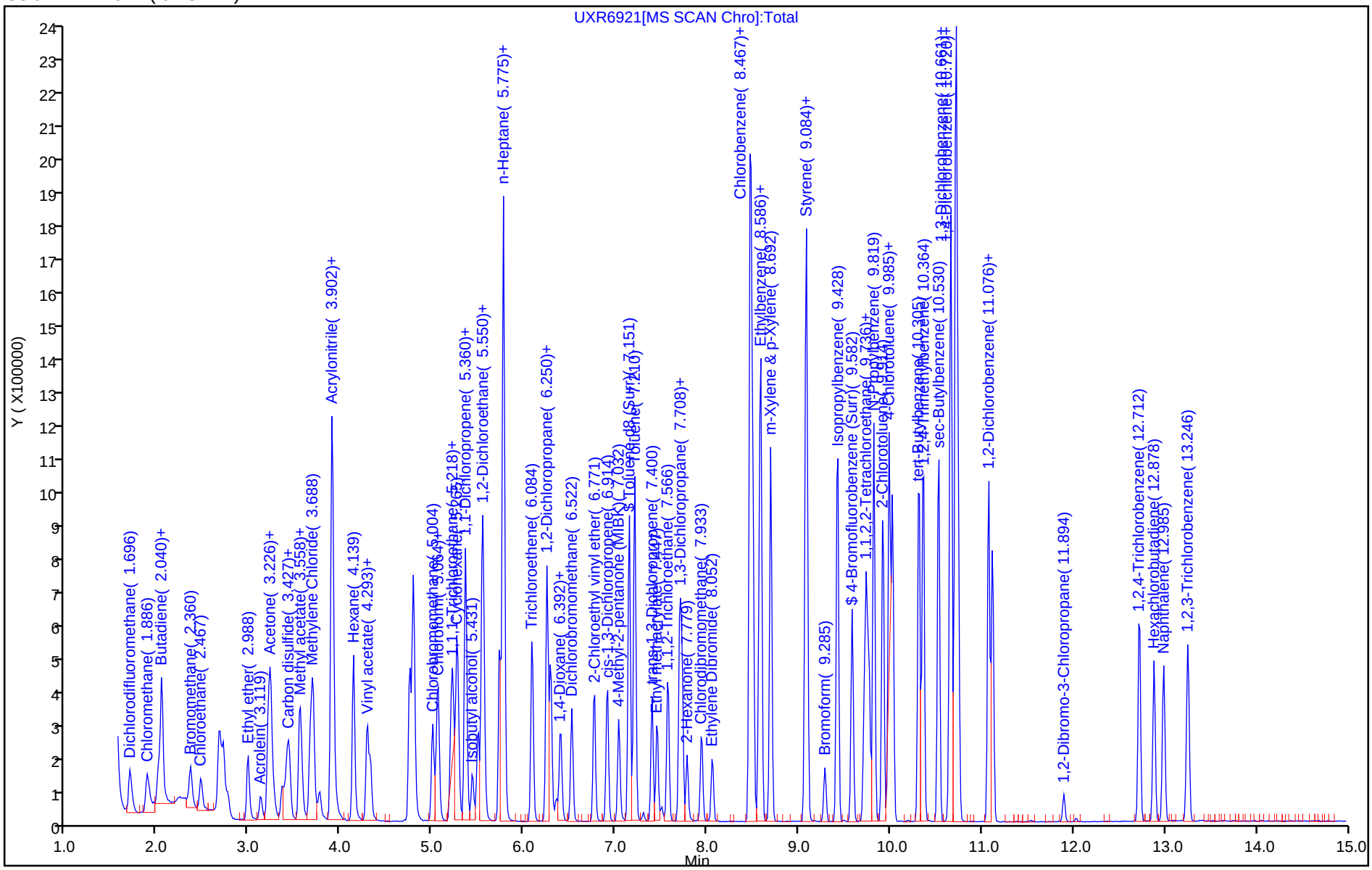
Report Date: 03-Oct-2018 09:28:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6921.D

Injection Date:	02-Oct-2018 13:22:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L3			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6922.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2018 13:46:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-007
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:29:03 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1672528	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	86	1284240	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	670366	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	79025	2.00	2.03	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.491	0.000	97	99878	2.00	2.03	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	325828	2.00	1.95	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	85	123874	2.00	1.99	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	95195	2.00	1.94	
10 Chloromethane	50	1.886	1.886	0.000	100	87103	2.00	1.97	
11 Vinyl chloride	62	2.004	2.004	0.000	98	99723	2.00	2.06	
119 Butadiene	54	2.040	2.040	0.000	91	103762	2.00	2.05	
12 Bromomethane	94	2.360	2.360	0.000	89	64773	2.00	2.07	
13 Chloroethane	64	2.467	2.467	0.000	100	64773	2.00	2.04	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	149156	2.00	2.01	
15 Trichlorofluoromethane	101	2.704	2.716	-0.012	98	118692	2.00	1.88	
16 Ethyl ether	59	2.988	2.988	0.000	90	67195	2.00	2.02	
18 Acrolein	56	3.131	3.119	0.012	97	36315	10.0	9.53	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	97	79498	2.00	1.95	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	92	58713	2.00	1.90	
21 Acetone	43	3.273	3.273	0.000	100	49590	4.00	4.28	
22 Iodomethane	142	3.380	3.356	0.024	98	124327	2.00	2.07	
23 Carbon disulfide	76	3.427	3.427	0.000	99	231729	2.00	1.94	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	45088	2.00	1.86	
26 Methyl acetate	43	3.570	3.569	0.001	96	85492	4.00	4.02	
27 Methylene Chloride	84	3.664	3.664	0.000	89	85229	2.00	2.01	
30 Methyl tert-butyl ether	73	3.902	3.902	0.000	95	204082	2.00	2.00	
29 Acrylonitrile	53	3.902	3.902	0.000	100	226890	20.0	19.5	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	84	92655	2.00	2.05	
28 2-Methyl-2-propanol	59	3.902	3.913	-0.011	25	5434	20.0	22.2	
32 Hexane	86	4.139	4.139	0.000	92	21637	2.00	1.75	
33 1,1-Dichloroethane	63	4.281	4.293	-0.012	96	152619	2.00	2.05	
34 Vinyl acetate	43	4.328	4.328	0.000	97	121997	2.00	1.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	54	16931	2.00	1.97	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	81	97963	2.00	1.99	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	97	52944	4.00	3.93	
44 Chlorobromomethane	128	5.004	5.004	0.000	91	45440	2.00	2.05	
45 Tetrahydrofuran	42	5.040	5.040	0.000	97	31085	4.00	3.96	
46 Chloroform	83	5.064	5.064	0.000	92	152468	2.00	2.03	
47 1,1,1-Trichloroethane	97	5.230	5.218	0.012	99	114015	2.00	2.00	
48 Cyclohexane	56	5.265	5.265	0.000	88	127621	2.00	1.87	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	94	120789	2.00	1.99	
50 Carbon tetrachloride	117	5.360	5.360	0.000	87	102962	2.00	1.96	
51 Isobutyl alcohol	41	5.443	5.431	0.012	89	38121	50.0	51.2	
52 Benzene	78	5.550	5.550	0.000	95	367692	2.00	2.02	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	123309	2.00	2.05	
55 n-Heptane	100	5.740	5.740	0.000	84	23430	2.00	1.94	
57 Trichloroethene	130	6.084	6.083	0.001	98	95245	2.00	1.99	
59 Methylcyclohexane	83	6.250	6.249	0.001	87	135701	2.00	1.84	
60 1,2-Dichloropropane	63	6.297	6.285	0.012	92	87450	2.00	2.04	
62 Dibromomethane	93	6.392	6.392	0.000	96	50725	2.00	2.03	
63 1,4-Dioxane	88	6.404	6.404	0.000	43	15055	40.0	41.9	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	109708	2.00	1.98	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	86100	4.00	3.74	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	94	112135	2.00	1.82	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	95	96178	4.00	3.81	
69 Toluene	91	7.210	7.210	0.000	98	391708	2.00	1.94	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	93	97871	2.00	1.80	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	74488	2.00	1.72	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	93	68879	2.00	1.91	
73 Tetrachloroethene	164	7.708	7.708	0.000	97	74359	2.00	1.98	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	90	129835	2.00	1.98	
76 2-Hexanone	43	7.779	7.779	0.000	94	62253	4.00	3.71	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	71862	2.00	1.86	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	64787	2.00	1.87	
81 Chlorobenzene	112	8.503	8.503	0.000	94	260647	2.00	1.98	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	94	81228	2.00	1.92	
83 Ethylbenzene	106	8.586	8.586	0.000	99	128105	2.00	1.85	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	157530	2.00	1.86	
85 o-Xylene	106	9.072	9.072	0.000	95	153236	2.00	1.88	
86 Styrene	104	9.084	9.084	0.000	94	250715	2.00	1.81	
87 Bromoform	173	9.285	9.285	0.000	94	38748	2.00	1.85	
89 Isopropylbenzene	105	9.416	9.428	-0.012	96	390467	2.00	1.82	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	97	78939	2.00	1.95	
92 Bromobenzene	156	9.736	9.736	0.000	95	97898	2.00	1.92	
94 1,2,3-Trichloropropane	110	9.772	9.771	0.001	82	27240	2.00	1.94	
93 trans-1,4-Dichloro-2-buten	53	9.772	9.771	0.001	65	18492	2.00	2.10	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	107875	2.00	1.84	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	95424	2.00	1.89	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	326914	2.00	1.84	
98 4-Chlorotoluene	126	10.021	10.020	0.001	97	103712	2.00	1.91	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	272505	2.00	1.81	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	339444	2.00	1.83	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	391262	2.00	1.81	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	339796	2.00	1.82	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	97	197846	2.00	1.94	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	211607	2.00	1.99	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	278312	2.00	1.77	
109 1,2-Dichlorobenzene	146	11.112	11.111	0.001	96	184691	2.00	1.92	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	80	12569	2.00	1.92	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	112860	2.00	1.98	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	97	55831	2.00	2.11	
115 Naphthalene	128	12.985	12.985	0.000	100	210166	2.00	1.77	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	103118	2.00	1.99	
S 128 1,2-Dichloroethene, Total	96				0			4.04	
S 129 1,3-Dichloropropene, Total	75				0			3.61	
S 130 Xylenes, Total	106				0		4.00	3.74	
S 131 Trihalomethanes, Total	1				0		8.00	7.71	

Reagents:

VMAROLISTDW_00267	Amount Added:	1.60	Units: uL
VMRPRIMW_00303	Amount Added:	1.60	Units: uL
VMRGAS_00263	Amount Added:	1.60	Units: uL
vm50ss_00337	Amount Added:	1.60	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

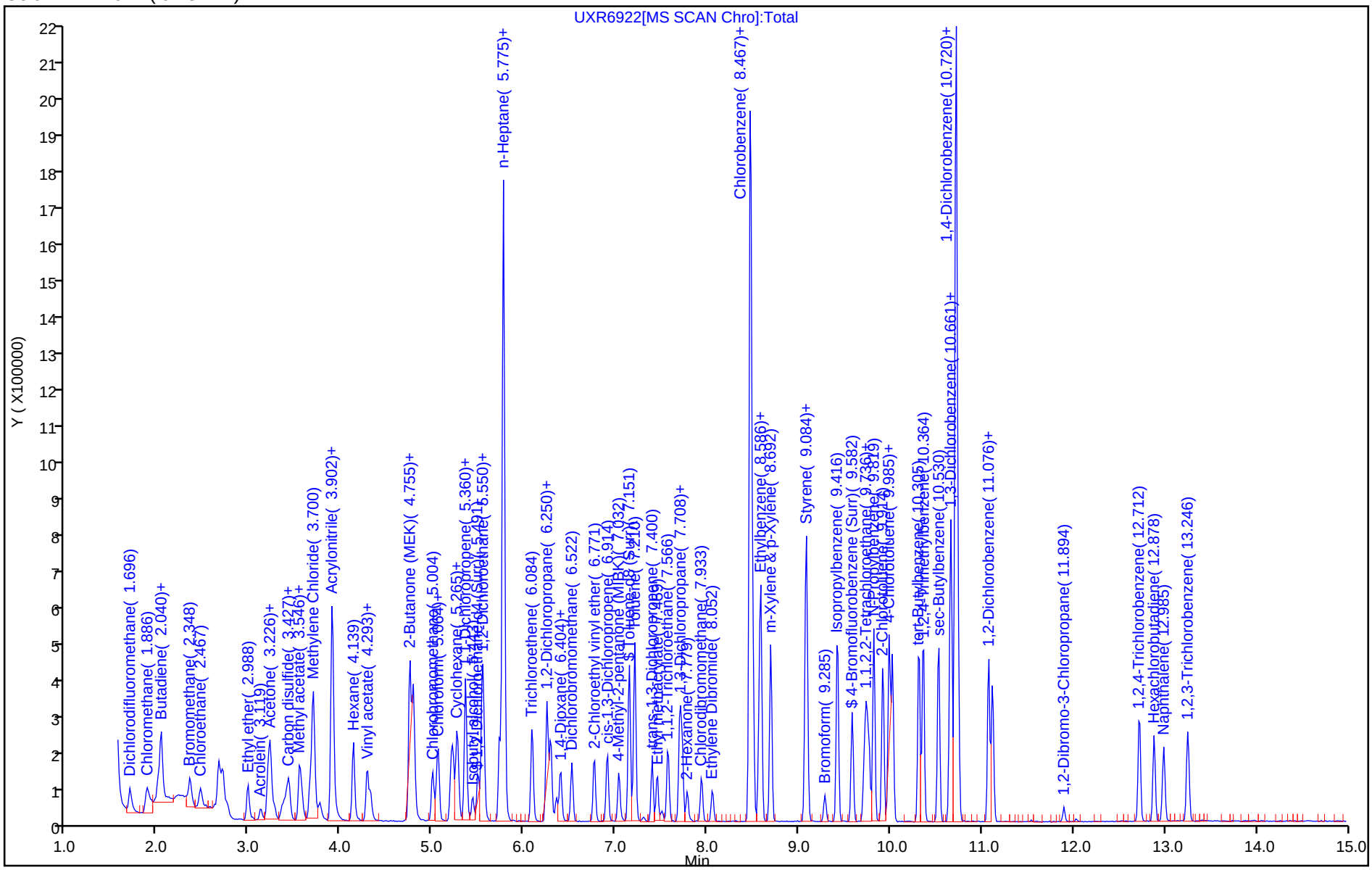
Report Date: 03-Oct-2018 09:29:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6922.D

Injection Date:	02-Oct-2018 13:46:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6923.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2018 14:10:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080442-008
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 09:29:14 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 02-Oct-2018 15:56:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1663997	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	86	1262380	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	638290	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	37597	1.00	0.9699	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.502	5.491	0.011	98	50644	1.00	1.03	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	155365	1.00	0.9446	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	84	57536	1.00	0.9385	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	46548	1.00	0.9517	
10 Chloromethane	50	1.886	1.886	0.000	98	42521	1.00	0.9667	
11 Vinyl chloride	62	2.004	2.004	0.000	97	47925	1.00	1.00	
119 Butadiene	54	2.040	2.040	0.000	89	51305	1.00	1.02	
12 Bromomethane	94	2.360	2.360	0.000	88	35810	1.00	1.15	
13 Chloroethane	64	2.467	2.467	0.000	98	34428	1.00	1.09	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	96	81979	1.00	1.11	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	99	63092	1.00	1.01	
16 Ethyl ether	59	2.988	2.988	0.000	90	32441	1.00	0.9816	
18 Acrolein	56	3.119	3.119	0.000	98	17815	5.00	4.70	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	99	41534	1.00	1.03	
20 1,1,2-Trichloro-1,2,2-trif	151	3.237	3.226	0.011	92	29314	1.00	0.9558	
21 Acetone	43	3.273	3.273	0.000	98	29434	2.00	2.05	
22 Iodomethane	142	3.368	3.356	0.012	99	59797	1.00	1.00	
23 Carbon disulfide	76	3.427	3.427	0.000	99	112494	1.00	0.9460	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	89	22385	1.00	0.9285	
26 Methyl acetate	43	3.569	3.569	0.000	96	42595	2.00	2.01	
27 Methylene Chloride	84	3.664	3.664	0.000	91	42268	1.00	1.00	
29 Acrylonitrile	53	3.901	3.902	-0.001	99	110259	10.0	9.55	
30 Methyl tert-butyl ether	73	3.901	3.902	-0.001	95	93266	1.00	0.9167	
28 2-Methyl-2-propanol	59	3.913	3.913	0.000	26	1592	10.0	8.22	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	99	45860	1.00	1.02	
32 Hexane	86	4.139	4.139	0.000	91	10308	1.00	0.8389	
33 1,1-Dichloroethane	63	4.293	4.293	0.000	96	69275	1.00	0.9374	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.328	4.328	0.000	96	56457	1.00	0.8768	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	80	49957	1.00	1.02	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	49	8952	1.00	1.05	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	58	33082	2.00	2.47	
44 Chlorobromomethane	128	5.004	5.004	0.000	90	22113	1.00	1.00	
45 Tetrahydrofuran	42	5.052	5.040	0.012	95	17306	2.00	2.22	
46 Chloroform	83	5.064	5.064	0.000	92	73848	1.00	0.9870	
47 1,1,1-Trichloroethane	97	5.230	5.218	0.012	97	54428	1.00	0.9575	
48 Cyclohexane	56	5.277	5.265	0.012	89	59656	1.00	0.8785	
50 Carbon tetrachloride	117	5.360	5.360	0.000	87	49160	1.00	0.9385	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	94	57204	1.00	0.9485	
51 Isobutyl alcohol	41	5.443	5.431	0.012	92	16523	25.0	22.6	
52 Benzene	78	5.550	5.550	0.000	95	175147	1.00	0.9653	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	60342	1.00	1.01	
55 n-Heptane	100	5.740	5.740	0.000	87	10221	1.00	0.8510	
57 Trichloroethene	130	6.083	6.083	0.000	97	47376	1.00	1.00	
59 Methylcyclohexane	83	6.249	6.249	0.000	86	64893	1.00	0.8854	
60 1,2-Dichloropropane	63	6.297	6.285	0.012	92	42363	1.00	1.00	
62 Dibromomethane	93	6.392	6.392	0.000	93	26256	1.00	1.06	
63 1,4-Dioxane	88	6.404	6.404	0.000	42	6776	20.0	18.9	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	53443	1.00	0.9691	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	94	39419	2.00	1.72	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	95	53678	1.00	0.8744	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	93	43788	2.00	1.75	
69 Toluene	91	7.210	7.210	0.000	97	185749	1.00	0.9376	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	94	44112	1.00	0.8242	
71 Ethyl methacrylate	69	7.459	7.459	0.000	90	34675	1.00	0.8147	
72 1,1,2-Trichloroethane	97	7.578	7.566	0.012	91	34652	1.00	0.9755	
73 Tetrachloroethene	164	7.708	7.708	0.000	96	35544	1.00	0.9610	
75 1,3-Dichloropropane	76	7.732	7.732	0.000	88	64097	1.00	1.00	
76 2-Hexanone	43	7.779	7.779	0.000	95	28399	2.00	1.72	
78 Chlorodibromomethane	129	7.933	7.933	0.000	89	34965	1.00	0.9186	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	32979	1.00	0.9667	
81 Chlorobenzene	112	8.503	8.503	0.000	94	125274	1.00	0.9705	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	90	39883	1.00	0.9573	
83 Ethylbenzene	106	8.586	8.586	0.000	99	61429	1.00	0.9033	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	73929	1.00	0.8883	
85 o-Xylene	106	9.072	9.072	0.000	96	68662	1.00	0.8557	
86 Styrene	104	9.084	9.084	0.000	93	113777	1.00	0.8353	
87 Bromoform	173	9.285	9.285	0.000	93	17050	1.00	0.8262	
89 Isopropylbenzene	105	9.416	9.428	-0.012	95	179343	1.00	0.8524	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	37934	1.00	0.9819	
92 Bromobenzene	156	9.748	9.736	0.012	94	46412	1.00	0.9539	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	65	7411	1.00	1.20	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	82	13206	1.00	0.9856	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	49032	1.00	0.8771	
96 2-Chlorotoluene	126	9.926	9.914	0.012	96	43328	1.00	0.9026	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	145860	1.00	0.8636	
98 4-Chlorotoluene	126	10.020	10.020	0.000	97	49640	1.00	0.9577	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	126831	1.00	0.8828	
101 1,2,4-Trimethylbenzene	105	10.353	10.364	-0.012	94	153010	1.00	0.8674	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	176670	1.00	0.8569	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.661	-0.012	96	93726	1.00	0.9643	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	149045	1.00	0.8394	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	93	101103	1.00	1.00	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	131815	1.00	0.8827	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	90363	1.00	0.9883	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	77	5892	1.00	0.9460	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	49758	1.00	0.9177	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	97	29506	1.00	1.17	
115 Naphthalene	128	12.985	12.985	0.000	100	93107	1.00	0.8251	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	48902	1.00	0.9899	
S 128 1,2-Dichloroethene, Total	96				0			2.04	
S 129 1,3-Dichloropropene, Total	75				0			1.70	
S 130 Xylenes, Total	106				0		2.00	1.74	
S 131 Trihalomethanes, Total	1				0		4.00	3.70	

Reagents:

VMRPRIMW_00303	Amount Added:	0.80	Units: uL
VMAROLISTDW_00267	Amount Added:	0.80	Units: uL
VMRGAS_00263	Amount Added:	0.80	Units: uL
vm50ss_00337	Amount Added:	0.80	Units: uL
VM50IS_00069	Amount Added:	1.00	Units: uL

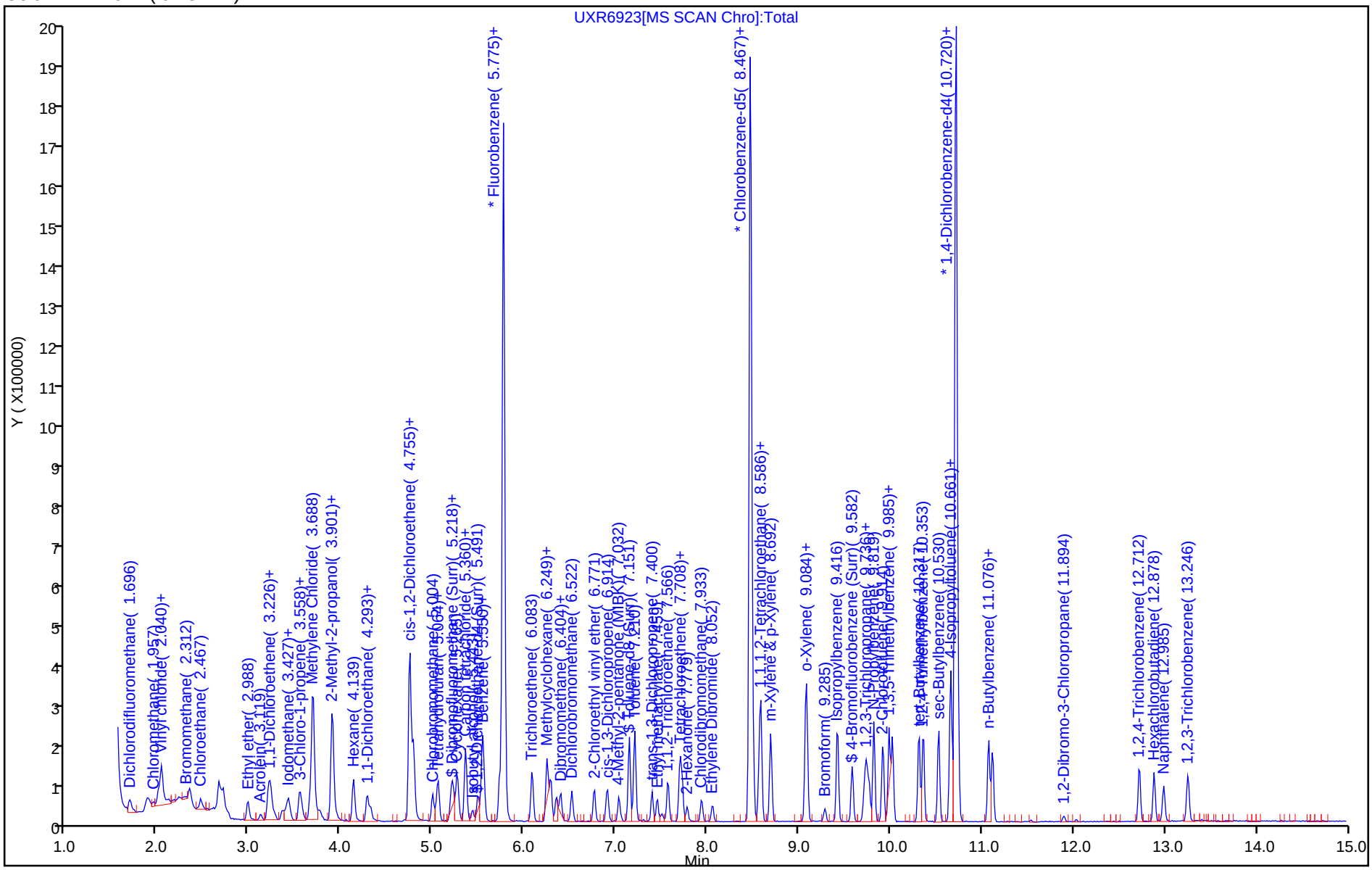
Report Date: 03-Oct-2018 09:29:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6923.D

Injection Date:	02-Oct-2018 14:10:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-108883-1

SDG No.:

Client Sample ID: MW-117S_030119 Lab Sample ID: 240-108883-1

Matrix: Water Lab File ID: UXR6926.D

Analysis Method: 8260B Date Collected: 03/01/2019 13:55

Sample wt/vol: 5(mL) Date Analyzed: 03/12/2019 21:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 371223 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.26	J	1.0	0.10
75-01-4	Vinyl chloride	0.66	J	1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122	X	70-121
460-00-4	4-Bromofluorobenzene (Surr)	86		59-120
2037-26-5	Toluene-d8 (Surr)	96		70-123
1868-53-7	Dibromofluoromethane (Surr)	105		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6926.D
Lims ID: 240-108883-D-1
Client ID: MW-117S_030119
Sample Type: Client
Inject. Date: 12-Mar-2019 21:42:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085092-023
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Mar-2019 09:41:40 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: williamsla Date: 13-Mar-2019 09:39:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1249376	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	886858	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.708	0.012	97	392727	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	93	306319	10.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.491	-0.001	96	449300	12.2	
$ 6 Toluene-d8 (Surr)	98	7.151	7.139	0.012	94	1111069	9.62	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	83	368466	8.56	
11 Vinyl chloride	62	2.004	2.004	0.000	97	24029	0.6649	
19 1,1-Dichloroethene	96		3.202				ND	
31 trans-1,2-Dichloroethene	96		3.902				ND	
39 cis-1,2-Dichloroethene	96	4.779	4.791	-0.012	70	3717	0.1009	
57 Trichloroethene	130	6.083	6.083	0.000	93	9219	0.2583	
73 Tetrachloroethene	164		7.696				ND	

Reagents:

vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00140	Amount Added:	0.00	Units:	Run Reagent

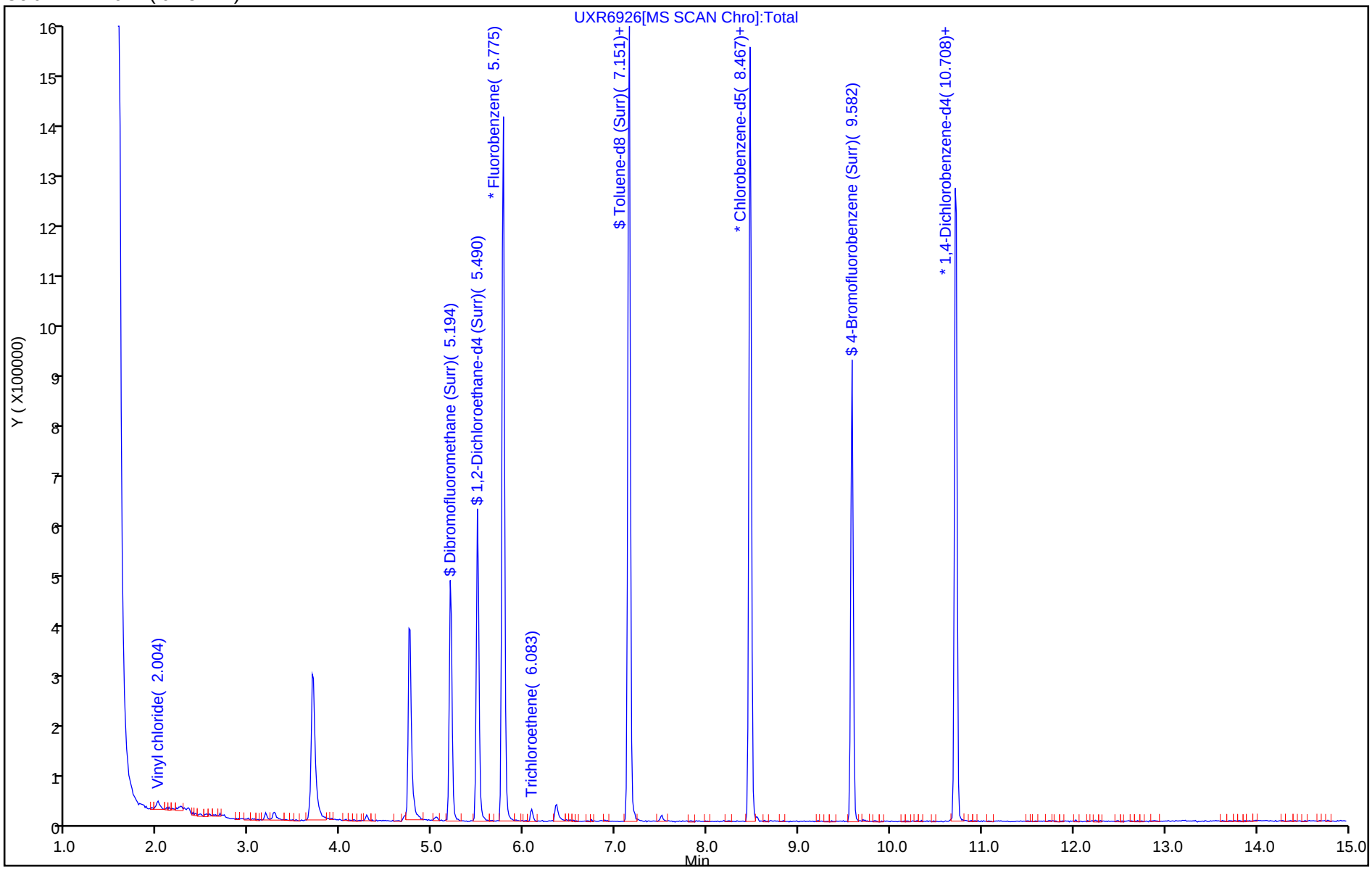
Report Date: 13-Mar-2019 09:42:16 Chrom Revision: 2.3 11-Feb-2019 16:31:10

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6926.D

Injection Date:	12-Mar-2019 21:42:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-108883-D-1	Lab Sample ID:	240-108883-1	Worklist Smp#:	23
Client ID:	MW-117S_030119				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6926.D
Lims ID: 240-108883-D-1
Client ID: MW-117S_030119
Sample Type: Client
Inject. Date: 12-Mar-2019 21:42:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085092-023
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Mar-2019 09:41:40 Calib Date: 02-Oct-2018 17:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20181002-80442.b\UXR6931.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: williamsla Date: 13-Mar-2019 09:39:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.5	105.24
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.2	122.13
$ 6 Toluene-d8 (Surr)	10.0	9.62	96.16
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.56	85.55

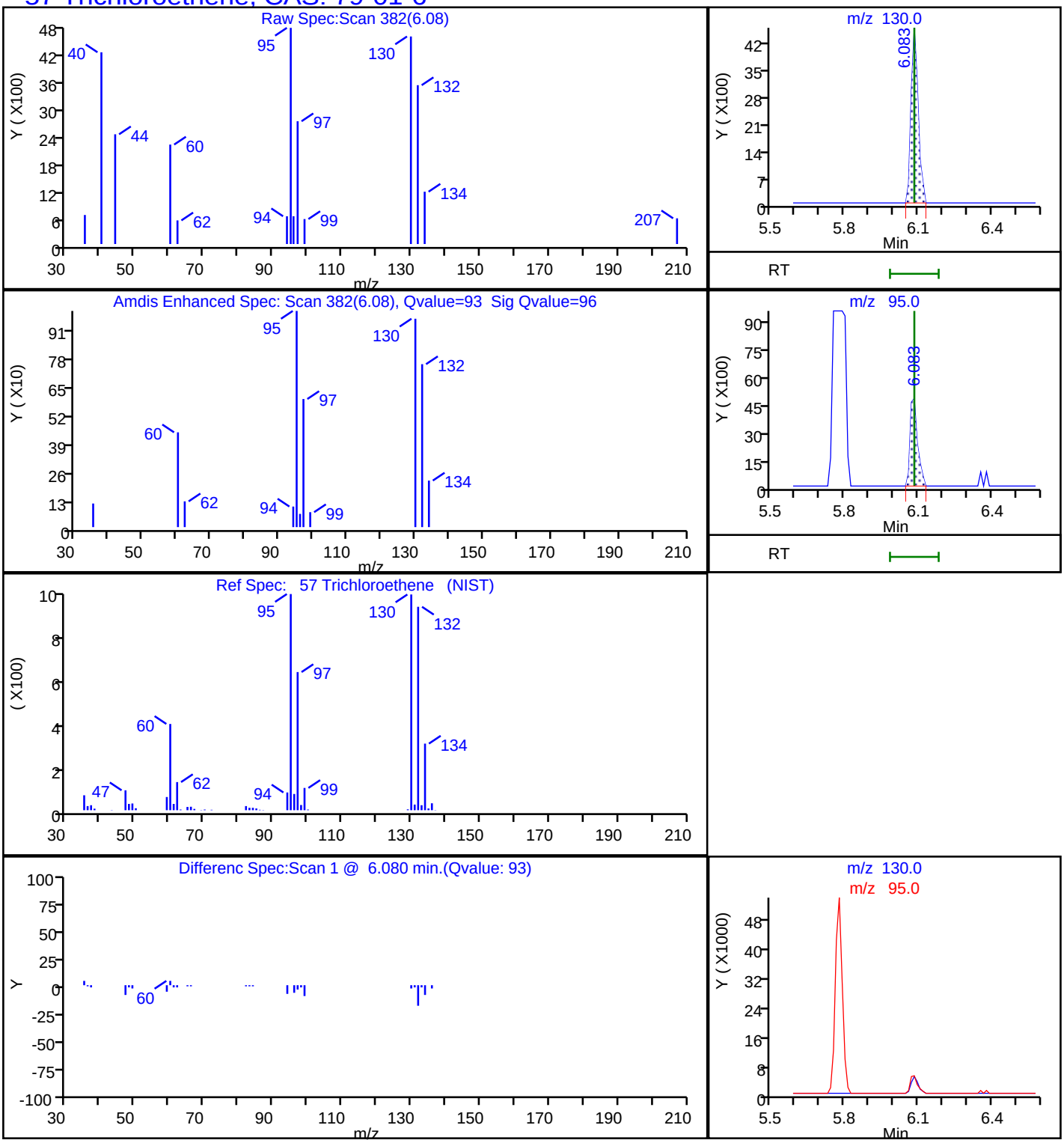
Report Date: 13-Mar-2019 09:42:16 Chrom Revision: 2.3 11-Feb-2019 16:31:10

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6926.D

Injection Date:	12-Mar-2019 21:42:30	Instrument ID:	A3UX17		
Lims ID:	240-108883-D-1	Lab Sample ID:	240-108883-1		
Client ID:	MW-117S_030119				
Operator ID:	001644	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Trichloroethene, CAS: 79-01-6



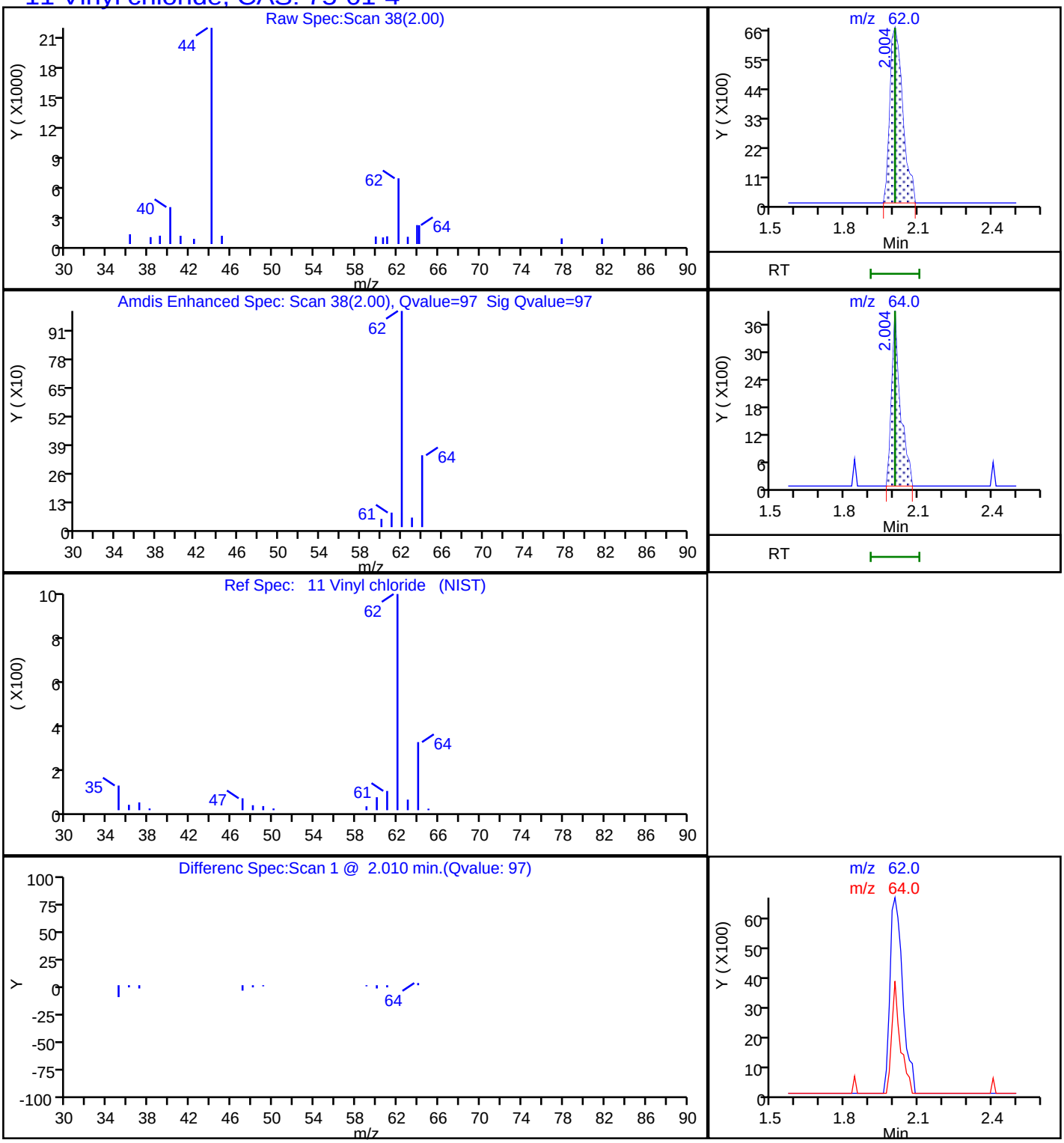
Report Date: 13-Mar-2019 09:42:16 Chrom Revision: 2.3 11-Feb-2019 16:31:10

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190312-85092.b\UXR6926.D

Injection Date:	12-Mar-2019 21:42:30	Instrument ID:	A3UX17		
Lims ID:	240-108883-D-1	Lab Sample ID:	240-108883-1		
Client ID:	MW-117S_030119				
Operator ID:	001644	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-108878-D-1 MS	Matrix Spike	107	112	107	90
240-108878-D-1 MSD	Matrix Spike Duplicate	102	105	103	88
240-108883-1	MW-117S_030119	122 X	86	96	105
LCS 240-371223/4	Lab Control Sample	99	109	106	92
MB 240-371223/7	Method Blank	112	86	97	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(63-125)
240-108883-1	MW-117S_030119	99
240-108941-C-1 MS	Matrix Spike	102
240-108941-C-1 MSD	Matrix Spike Duplicate	100
LCS 240-371053/4	Lab Control Sample	98
MB 240-371053/5	Method Blank	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(10-150)
MRL 240-371053/6	Lab Control Sample	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-371223/7
Matrix: Water
Analysis Batch: 371223

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 14:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/19 14:16	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/19 14:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 14:16	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/12/19 14:16	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/12/19 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 121*		*03/12/19 14:16*	*1*
4-Bromofluorobenzene (Surr)	*86*		*59 - 120*		*03/12/19 14:16*	*1*
Toluene-d8 (Surr)	*97*		*70 - 123*		*03/12/19 14:16*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 128*		*03/12/19 14:16*	*1*

Lab Sample ID: LCS 240-371223/4
Matrix: Water
Analysis Batch: 371223

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.86		ug/L		99	65 - 139
cis-1,2-Dichloroethene	10.0	9.54		ug/L		95	76 - 128
Tetrachloroethene	10.0	9.71		ug/L		97	74 - 130
trans-1,2-Dichloroethene	10.0	9.95		ug/L		99	78 - 133
Trichloroethene	10.0	8.31		ug/L		83	76 - 125
Vinyl chloride	10.0	10.2		ug/L		102	58 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 121*
4-Bromofluorobenzene (Surr)	*109*		*59 - 120*
Toluene-d8 (Surr)	*106*		*70 - 123*
Dibromofluoromethane (Surr)	*92*		*75 - 128*

Lab Sample ID: 240-108878-D-1 MS
Matrix: Water
Analysis Batch: 371223

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	100	U	1000	873		ug/L		87	53 - 140
cis-1,2-Dichloroethene	2600	F1	1000	3170	F1	ug/L		56	64 - 130
Tetrachloroethene	100	U	1000	902		ug/L		90	51 - 136
trans-1,2-Dichloroethene	760		1000	1590		ug/L		82	68 - 133
Trichloroethene	100	U	1000	769		ug/L		77	55 - 131
Vinyl chloride	230		1000	1220		ug/L		98	43 - 154

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 121*
4-Bromofluorobenzene (Surr)	*112*		*59 - 120*
Toluene-d8 (Surr)	*107*		*70 - 123*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-108878-D-1 MS
Matrix: Water
Analysis Batch: 371223

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	90		75 - 128

Lab Sample ID: 240-108878-D-1 MSD
Matrix: Water
Analysis Batch: 371223

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	100	U	1000	935		ug/L		94	53 - 140	7	35
cis-1,2-Dichloroethene	2600	F1	1000	3260		ug/L		65	64 - 130	3	21
Tetrachloroethene	100	U	1000	875		ug/L		87	51 - 136	3	23
trans-1,2-Dichloroethene	760		1000	1640		ug/L		87	68 - 133	3	24
Trichloroethene	100	U	1000	786		ug/L		79	55 - 131	2	23
Vinyl chloride	230		1000	1270		ug/L		104	43 - 154	4	29

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 121
4-Bromofluorobenzene (Surr)	105		59 - 120
Toluene-d8 (Surr)	103		70 - 123
Dibromofluoromethane (Surr)	88		75 - 128

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-371053/5
Matrix: Water
Analysis Batch: 371053

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/11/19 13:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 125		03/11/19 13:11	1

Lab Sample ID: LCS 240-371053/4
Matrix: Water
Analysis Batch: 371053

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	11.1		ug/L		111	59 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 125

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-371053/6
Matrix: Water
Analysis Batch: 371053

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			0.00100	0.00129	J	ng/uL		129	10 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*10 - 150*

Lab Sample ID: 240-108941-C-1 MS
Matrix: Water
Analysis Batch: 371053

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	1.6	J	10.0	13.1		ug/L		115	52 - 129		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 125*

Lab Sample ID: 240-108941-C-1 MSD
Matrix: Water
Analysis Batch: 371053

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.6	J	10.0	11.7		ug/L		102	52 - 129	11	13

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 125*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

GC/MS VOA

Analysis Batch: 371053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-108883-1	MW-117S_030119	Total/NA	Water	8260B SIM	
MB 240-371053/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-371053/4	Lab Control Sample	Total/NA	Water	8260B SIM	
MRL 240-371053/6	Lab Control Sample	Total/NA	Water	8260B SIM	
240-108941-C-1 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-108941-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 371223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-108883-1	MW-117S_030119	Total/NA	Water	8260B	
MB 240-371223/7	Method Blank	Total/NA	Water	8260B	
LCS 240-371223/4	Lab Control Sample	Total/NA	Water	8260B	
240-108878-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-108878-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Client Sample ID: MW-117S_030119
Date Collected: 03/01/19 13:55
Date Received: 03/05/19 08:15

Lab Sample ID: 240-108883-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	371223	03/12/19 21:42	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	371053	03/11/19 18:19	SAM	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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1.6/C1.4 1.2/C1.0 0.4/C0.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Angela DeGrandis	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-320-0065	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com			For lab use only
Phone: 248-994-2240				Walk-in client
Project Name: Ford LTP				Lab sampling
Project Number: ~~MI001454.0004.00003~~ MI001454.0006.00003	Method of Shipment/Carrier:			Job/SDG No:
PO # ~~MI001454.0004.00002~~ MI001454.0006.00002	Shipping/Tracking No:			

Analysis Turnaround Time

TAT if different from below ☐
10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
MW-17S-030119	3/1/19	1355		X						X					N	G	X	X	X	X	X	X	3	3 VOAs FOR 8260B 3 VOAs FOR 8260B SIM

240-108883 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jim.tomalia@cadena.com, Cadena #E203631
Level IV Reporting.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	3/1/19 1820	NOVI COLD STORAGE	ARCADIS	3/1/19 1820
Caitlin O'Neill	ARCADIS	3/4/19 14:10		TESTAMERICA	3/4/19 1410
	TESTAMERICA	3/4/19 14:45	Received in Laboratory by:	TA	3-5-19 815

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 108883**
Canton Facility

Client Arcadis Site Name

Cooler Received on 3-5-19 Opened on 3-5-19 815

Cooler unpacked by: Ryan Cribley

FedEx: 1st (Grd) Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) (Foam) (Plastic Bag) None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ▨ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 0.2 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC861525**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B831701VB (Yes) No
16. Was a LL Hg or Me Hg trip blank present? Yes (No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

March 19, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - North Canton
Laboratory submittal: 108883-1
Sample date: 2019-03-01
Report received by CADENA: 2019-03-19
Initial Data Verification completed by CADENA: 2019-03-19

The following minor QC exceptions or missing information were noted:

SUR - GCMS VOC surrogate recoveries were outside of laboratory control limits biased HIGH for at least 1 surrogate. These client sample results that were detected for the analytical fraction specified should be considered to be estimated and qualified with J flags (non-detect results do not require qualification):
GCMS VOC sample -001 - TRICHLOROETHYLENE, VINYL CHLORIDE.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS VOC QC batch 371223.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

1 Water sample(s) was analyzed for GCMS VOC parameter(s).

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Qualified Results Summary

CADENA Project ID: E203631
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 108883-1

Sample Name: MW-117S_030119
Lab Sample ID: 2401088831
Sample Date: 3/1/2019

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260B					
Trichloroethene	79-01-6	0.26	1.0	ug/l	J
Vinyl chloride	75-01-4	0.66	1.0	ug/l	J

Analytical Results Summary

CADENA Project ID: E203631
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 108883-1

Sample Name: MW-117S_030119
Lab Sample ID: 2401088831
Sample Date: 3/1/2019

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260B					
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
Trichloroethene	79-01-6	0.26	1.0	ug/l	J
Vinyl chloride	75-01-4	0.66	1.0	ug/l	J
OSW-8260BBSim					
1,4-Dioxane	123-91-1	ND	2.0	ug/l	---

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

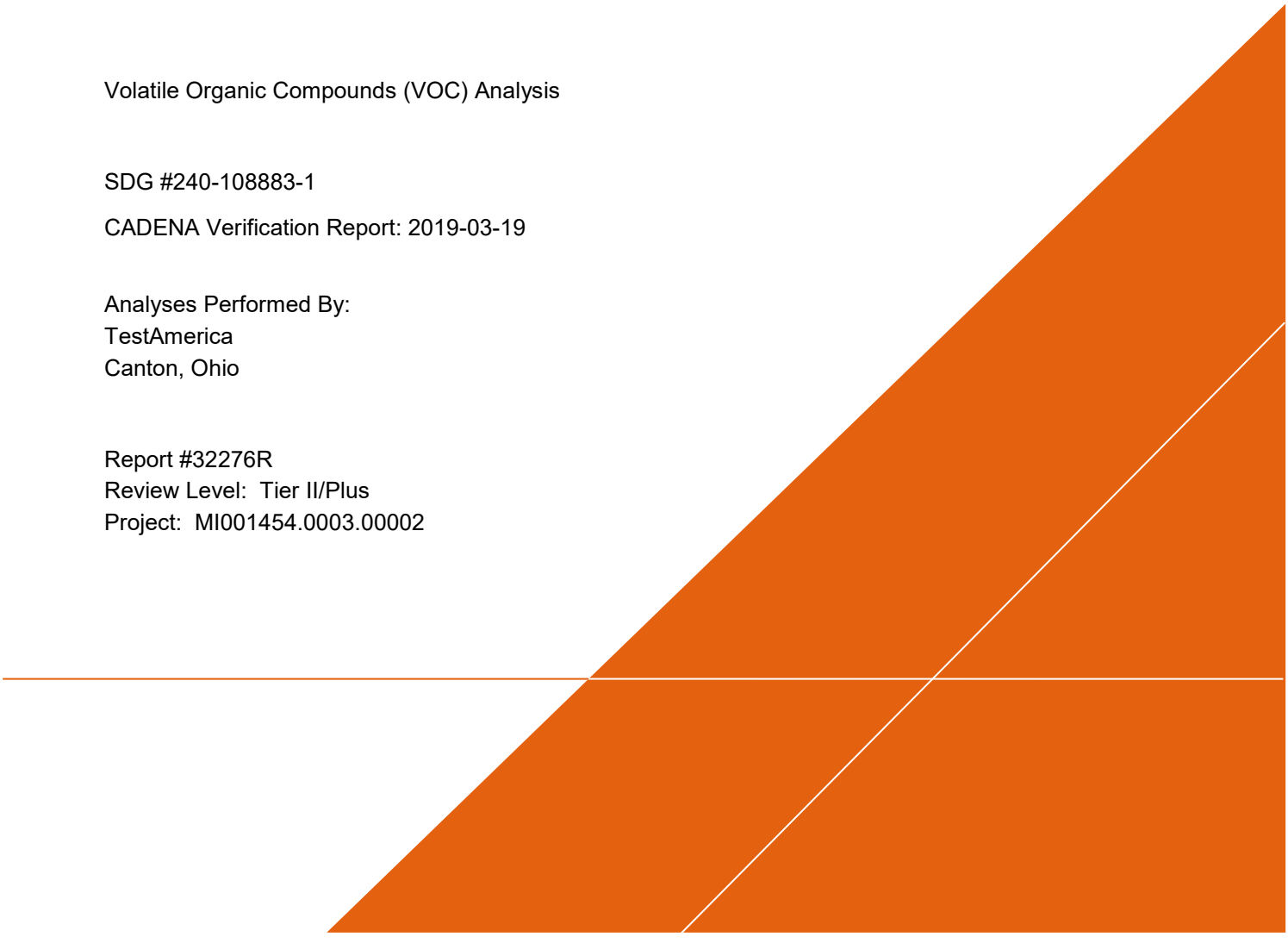
Volatile Organic Compounds (VOC) Analysis

SDG #240-108883-1

CADENA Verification Report: 2019-03-19

Analyses Performed By:
TestAmerica
Canton, Ohio

Report #32276R
Review Level: Tier II/Plus
Project: MI001454.0003.00002



SUMMARY

This data quality assessment/verification summarizes the confirmation of detected compounds (if applicable), review of the verification/Tier II validation review performed by CADENA Inc. and review of level II laboratory data package completeness for Sample Delivery Group (SDG) # 240-108883-1 for samples collected in association with the Ford – Livonia, Michigan site. Only detected compound confirmations and omitted deviations from the CADENA verification/Tier II report are documented in this report. The Tier II/Plus validation is performed in the instance when a sample location has a detection at a concentration of 5 ppb or less. The detection and the concentration are reviewed and verified based on the instrument calibration and laboratory raw data. Only analytical data associated with constituents of concern were reviewed for this verification. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						VOC	VOC (SIM)	MISC
240-108883-1	MW-117S_030119	240-108883-1	Water	3/1/2019		X	X	

Notes:
VOC = volatile organic compound
SIM = selective ion monitoring
MISC = miscellaneous

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and 8260B SIM. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

1.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

1.2 Continuing Calibration

All target compounds associated with the continuing calibration verification (CCV) standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-117S_030119	CCV %D	Trichloroethene	-22.7%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Continuing Calibration	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

2. Compound Identification

Compounds are identified on the GC/MS by using the analyte's relative retention time, ion spectra, and concentration.

All identified compounds met the criteria defined in the analytical method.

3. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in the CADENA Inc. review and this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260B/8260B-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II+ Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	

Notes:

RT retention time

VERIFICATION/VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE: 

DATE: April 3, 2019

PEER REVIEW: Dennis Capria

DATE: April 3, 2019

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

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1.6/C1.4 1.2/C1.0 0.4/C0.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Angela DeGrandis	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-320-0065	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com			For lab use only
Phone: 248-994-2240				Walk-in client
Project Name: Ford LTP				Lab sampling
Project Number: ~~MI001454.0004.00003~~ MI001454.0006.00003	Method of Shipment/Carrier:			Job/SDG No:
PO # ~~MI001454.0004.00002~~ MI001454.0006.00002	Shipping/Tracking No:			

Analysis Turnaround Time

TAT if different from below ☐
10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
MW-17S-030119	3/1/19	1355		X						X					N	G	X	X	X	X	X	X	3	3 VOAs FOR 8260B 3 VOAs FOR 8260B SIM

240-108883 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jim.tomalia@cadena.com, Cadena #E203631
Level IV Reporting.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	3/1/19 1820	NOVI COLD STORAGE	ARCADIS	3/1/19 1820
Caitlin O'Neill	ARCADIS	3/4/19 14:10		TESTAMERICA	3/4/19 1410
	TESTAMERICA	3/4/19 14:45	Received in Laboratory by:	TA	3-5-19 815

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

TestAmerica Job ID: 240-108883-1

Client Sample ID: MW-117S_030119
Date Collected: 03/01/19 13:55
Date Received: 03/05/19 08:15

Lab Sample ID: 240-108883-1
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/11/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 125*		*03/11/19 18:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 21:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/12/19 21:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/12/19 21:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/12/19 21:42	1
Trichloroethene	**0.26**	**J**	1.0	0.10	ug/L			03/12/19 21:42	1
Vinyl chloride	**0.66**	**J**	1.0	0.20	ug/L			03/12/19 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*	*X*	*70 - 121*		*03/12/19 21:42*	*1*
4-Bromofluorobenzene (Surr)	*86*		*59 - 120*		*03/12/19 21:42*	*1*
Toluene-d8 (Surr)	*96*		*70 - 123*		*03/12/19 21:42*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 128*		*03/12/19 21:42*	*1*