

ANALYTICAL REPORT

PREPARED FOR

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Generated 12/2/2022 8:25:49 AM

JOB DESCRIPTION

Ford LTP - On Site

JOB NUMBER

240-176531-1

Eurofins Canton

Job Notes

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Authorization



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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Job ID: 240-176531-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-176531-1

Comments

No additional comments.

Receipt

The samples were received on 11/16/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

GC/MS VOA

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

VOA Prep

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

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Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	EET CAN
5030C	Purge and Trap	SW846	EET CAN

Protocol References:

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

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-176531-1	TRIP BLANK_209	Water	11/14/22 00:00	11/16/22 08:00
240-176531-2	MW-66_111422	Water	11/14/22 10:00	11/16/22 08:00
240-176531-3	MW-65_111422	Water	11/14/22 11:05	11/16/22 08:00
240-176531-4	MW-44_111422	Water	11/14/22 11:50	11/16/22 08:00
240-176531-5	PW-16-01_111422	Water	11/14/22 12:40	11/16/22 08:00
240-176531-6	DUP-02	Water	11/14/22 00:00	11/16/22 08:00

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- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: TRIP BLANK_209

Lab Sample ID: 240-176531-1

No Detections.

Client Sample ID: MW-66_111422

Lab Sample ID: 240-176531-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-65_111422

Lab Sample ID: 240-176531-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-44_111422

Lab Sample ID: 240-176531-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	160		5.0	2.3	ug/L	5		8260D	Total/NA

Client Sample ID: PW-16-01_111422

Lab Sample ID: 240-176531-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	73		20	9.2	ug/L	20		8260D	Total/NA
Vinyl chloride	930	F1	20	9.0	ug/L	20		8260D	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 240-176531-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: TRIP BLANK_209

Lab Sample ID: 240-176531-1

Date Collected: 11/14/22 00:00

Matrix: Water

Date Received: 11/16/22 08:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/23/22 16:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/23/22 16:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 16:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/23/22 16:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 16:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/23/22 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		11/23/22 16:36	1
4-Bromofluorobenzene (Surr)	99		56 - 136		11/23/22 16:36	1
Toluene-d8 (Surr)	96		78 - 122		11/23/22 16:36	1
Dibromofluoromethane (Surr)	96		73 - 120		11/23/22 16:36	1

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: MW-66_111422

Lab Sample ID: 240-176531-2

Date Collected: 11/14/22 10:00

Matrix: Water

Date Received: 11/16/22 08:00

Method: SW846 8260D 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			11/27/22 22:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		66 - 120					11/27/22 22:14	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/23/22 16:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/23/22 16:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 16:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/23/22 16:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 16:59	1
Vinyl chloride	1.9		1.0	0.45	ug/L			11/23/22 16:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		62 - 137					11/23/22 16:59	1
4-Bromofluorobenzene (Surr)	85		56 - 136					11/23/22 16:59	1
Toluene-d8 (Surr)	103		78 - 122					11/23/22 16:59	1
Dibromofluoromethane (Surr)	96		73 - 120					11/23/22 16:59	1

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: MW-65_111422

Lab Sample ID: 240-176531-3

Date Collected: 11/14/22 11:05

Matrix: Water

Date Received: 11/16/22 08:00

Method: SW846 8260D 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			11/23/22 06:59	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		66 - 120					11/23/22 06:59	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/23/22 17:22	1
cis-1,2-Dichloroethene	3.9		1.0	0.46	ug/L			11/23/22 17:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/23/22 17:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 17:22	1
Vinyl chloride	8.3		1.0	0.45	ug/L			11/23/22 17:22	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137					11/23/22 17:22	1
4-Bromofluorobenzene (Surr)	89		56 - 136					11/23/22 17:22	1
Toluene-d8 (Surr)	106		78 - 122					11/23/22 17:22	1
Dibromofluoromethane (Surr)	99		73 - 120					11/23/22 17:22	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: MW-44_111422

Lab Sample ID: 240-176531-4

Date Collected: 11/14/22 11:50

Matrix: Water

Date Received: 11/16/22 08:00

Method: SW846 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	8.0		2.0	0.86	ug/L			11/23/22 07:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		66 - 120					11/23/22 07:25	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			11/23/22 17:46	5
cis-1,2-Dichloroethene	5.0	U	5.0	2.3	ug/L			11/23/22 17:46	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			11/23/22 17:46	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			11/23/22 17:46	5
Trichloroethene	5.0	U	5.0	2.2	ug/L			11/23/22 17:46	5
Vinyl chloride	160		5.0	2.3	ug/L			11/23/22 17:46	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		62 - 137					11/23/22 17:46	5
4-Bromofluorobenzene (Surr)	90		56 - 136					11/23/22 17:46	5
Toluene-d8 (Surr)	104		78 - 122					11/23/22 17:46	5
Dibromofluoromethane (Surr)	99		73 - 120					11/23/22 17:46	5

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: PW-16-01_111422

Lab Sample ID: 240-176531-5

Date Collected: 11/14/22 12:40

Matrix: Water

Date Received: 11/16/22 08:00

Method: SW846 8260D 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			11/23/22 07:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		66 - 120					11/23/22 07:50	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	20	U	20	9.8	ug/L			11/23/22 18:09	20
cis-1,2-Dichloroethene	73		20	9.2	ug/L			11/23/22 18:09	20
Tetrachloroethene	20	U	20	8.8	ug/L			11/23/22 18:09	20
trans-1,2-Dichloroethene	20	U	20	10	ug/L			11/23/22 18:09	20
Trichloroethene	20	U	20	8.8	ug/L			11/23/22 18:09	20
Vinyl chloride	930	F1	20	9.0	ug/L			11/23/22 18:09	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		62 - 137					11/23/22 18:09	20
4-Bromofluorobenzene (Surr)	91		56 - 136					11/23/22 18:09	20
Toluene-d8 (Surr)	110		78 - 122					11/23/22 18:09	20
Dibromofluoromethane (Surr)	101		73 - 120					11/23/22 18:09	20

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: DUP-02
Date Collected: 11/14/22 00:00
Date Received: 11/16/22 08:00

Lab Sample ID: 240-176531-6
Matrix: Water

Method: SW846 8260D 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			11/23/22 08:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		66 - 120					11/23/22 08:16	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/23/22 18:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/23/22 18:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 18:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/23/22 18:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 18:32	1
Vinyl chloride	2.2		1.0	0.45	ug/L			11/23/22 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		62 - 137					11/23/22 18:32	1
4-Bromofluorobenzene (Surr)	90		56 - 136					11/23/22 18:32	1
Toluene-d8 (Surr)	107		78 - 122					11/23/22 18:32	1
Dibromofluoromethane (Surr)	100		73 - 120					11/23/22 18:32	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (62-137)	BFB (56-136)	TOL (78-122)	DBFM (73-120)
240-176531-1	TRIP BLANK_209	104	99	96	96
240-176531-2	MW-66_111422	105	85	103	96
240-176531-3	MW-65_111422	107	89	106	99
240-176531-4	MW-44_111422	108	90	104	99
240-176531-5	PW-16-01_111422	112	91	110	101
240-176531-5 MS	PW-16-01_111422	101	98	110	94
240-176531-5 MSD	PW-16-01_111422	100	107	104	95
240-176531-6	DUP-02	109	90	107	100
LCS 240-553308/5	Lab Control Sample	100	103	112	93
MB 240-553308/8	Method Blank	103	89	103	95

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		DCA (66-120)
240-176531-2	MW-66_111422	76
240-176531-3	MW-65_111422	80
240-176531-4	MW-44_111422	77
240-176531-5	PW-16-01_111422	80
240-176531-6	DUP-02	78
240-176555-B-1 MS	Matrix Spike	77
240-176555-B-1 MSD	Matrix Spike Duplicate	81
240-176634-I-5 MS	Matrix Spike	80
240-176634-O-5 MSD	Matrix Spike Duplicate	80
LCS 240-553221/3	Lab Control Sample	76
LCS 240-553480/3	Lab Control Sample	76
MB 240-553221/4	Method Blank	76
MB 240-553480/4	Method Blank	76

Surrogate Legend

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

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-553308/8
Matrix: Water
Analysis Batch: 553308

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	0.49	ug/L			11/23/22 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/23/22 11:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/23/22 11:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/23/22 11:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/23/22 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		62 - 137		11/23/22 11:34	1
4-Bromofluorobenzene (Surr)	89		56 - 136		11/23/22 11:34	1
Toluene-d8 (Surr)	103		78 - 122		11/23/22 11:34	1
Dibromofluoromethane (Surr)	95		73 - 120		11/23/22 11:34	1

Lab Sample ID: LCS 240-553308/5
Matrix: Water
Analysis Batch: 553308

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	20.0	16.6		ug/L		83	63 - 134
cis-1,2-Dichloroethene	20.0	16.3		ug/L		81	77 - 123
Tetrachloroethene	20.0	19.6		ug/L		98	76 - 123
trans-1,2-Dichloroethene	20.0	16.4		ug/L		82	75 - 124
Trichloroethene	20.0	16.7		ug/L		84	70 - 122
Vinyl chloride	20.0	16.2		ug/L		81	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	103		56 - 136
Toluene-d8 (Surr)	112		78 - 122
Dibromofluoromethane (Surr)	93		73 - 120

Lab Sample ID: 240-176531-5 MS
Matrix: Water
Analysis Batch: 553308

Client Sample ID: PW-16-01_111422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20	U	400	298		ug/L		75	56 - 135
cis-1,2-Dichloroethene	73		400	378		ug/L		76	66 - 128
Tetrachloroethene	20	U	400	337		ug/L		84	62 - 131
trans-1,2-Dichloroethene	20	U	400	309		ug/L		77	56 - 136
Trichloroethene	20	U	400	299		ug/L		75	61 - 124
Vinyl chloride	930	F1	400	1140		ug/L		51	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	110		78 - 122

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

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

Lab Sample ID: 240-176531-5 MS
Matrix: Water
Analysis Batch: 553308

Client Sample ID: PW-16-01_111422
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	94		73 - 120

Lab Sample ID: 240-176531-5 MSD
Matrix: Water
Analysis Batch: 553308

Client Sample ID: PW-16-01_111422
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	20	U	400	304		ug/L		76	56 - 135	2	26
cis-1,2-Dichloroethene	73		400	387		ug/L		78	66 - 128	2	14
Tetrachloroethene	20	U	400	352		ug/L		88	62 - 131	4	20
trans-1,2-Dichloroethene	20	U	400	317		ug/L		79	56 - 136	2	15
Trichloroethene	20	U	400	316		ug/L		79	61 - 124	6	15
Vinyl chloride	930	F1	400	1090	F1	ug/L		38	43 - 157	5	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	107		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	95		73 - 120

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

Lab Sample ID: MB 240-553221/4
Matrix: Water
Analysis Batch: 553221

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			11/23/22 06:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		66 - 120		11/23/22 06:09	1

Lab Sample ID: LCS 240-553221/3
Matrix: Water
Analysis Batch: 553221

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	9.27		ug/L		93	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	76		66 - 120

Lab Sample ID: 240-176555-B-1 MS
Matrix: Water
Analysis Batch: 553221

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	14		10.0	26.1		ug/L		116	51 - 153

Eurofins Canton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

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

	<i>MS</i>	<i>MS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	77		66 - 120

Lab Sample ID: 240-176555-B-1 MSD
Matrix: Water
Analysis Batch: 553221

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,4-Dioxane	14		10.0	27.3		ug/L		128	51 - 153	4	16

	<i>MSD</i>	<i>MSD</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	81		66 - 120

Lab Sample ID: MB 240-553480/4
Matrix: Water
Analysis Batch: 553480

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

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/27/22 19:42	1

	<i>MB</i>	<i>MB</i>		<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			
1,2-Dichloroethane-d4 (Surr)	76		66 - 120		11/27/22 19:42	1

Lab Sample ID: LCS 240-553480/3
Matrix: Water
Analysis Batch: 553480

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

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
1,4-Dioxane	10.0	8.98		ug/L		90	80 - 122

	<i>LCS</i>	<i>LCS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	76		66 - 120

Lab Sample ID: 240-176634-I-5 MS
Matrix: Water
Analysis Batch: 553480

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
1,4-Dioxane	2.0	U	10.0	10.2		ug/L		102	51 - 153

	<i>MS</i>	<i>MS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	80		66 - 120

Lab Sample ID: 240-176634-O-5 MSD
Matrix: Water
Analysis Batch: 553480

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	51 - 153	2	16

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

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

Lab Sample ID: 240-176634-O-5 MSD
Matrix: Water
Analysis Batch: 553480

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

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	80		66 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

GC/MS VOA

Analysis Batch: 553221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-176531-3	MW-65_111422	Total/NA	Water	8260D SIM	
240-176531-4	MW-44_111422	Total/NA	Water	8260D SIM	
240-176531-5	PW-16-01_111422	Total/NA	Water	8260D SIM	
240-176531-6	DUP-02	Total/NA	Water	8260D SIM	
MB 240-553221/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-553221/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-176555-B-1 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-176555-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 553308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-176531-1	TRIP BLANK_209	Total/NA	Water	8260D	
240-176531-2	MW-66_111422	Total/NA	Water	8260D	
240-176531-3	MW-65_111422	Total/NA	Water	8260D	
240-176531-4	MW-44_111422	Total/NA	Water	8260D	
240-176531-5	PW-16-01_111422	Total/NA	Water	8260D	
240-176531-6	DUP-02	Total/NA	Water	8260D	
MB 240-553308/8	Method Blank	Total/NA	Water	8260D	
LCS 240-553308/5	Lab Control Sample	Total/NA	Water	8260D	
240-176531-5 MS	PW-16-01_111422	Total/NA	Water	8260D	
240-176531-5 MSD	PW-16-01_111422	Total/NA	Water	8260D	

Analysis Batch: 553480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-176531-2	MW-66_111422	Total/NA	Water	8260D SIM	
MB 240-553480/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-553480/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-176634-I-5 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-176634-O-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Client Sample ID: TRIP BLANK_209

Lab Sample ID: 240-176531-1

Date Collected: 11/14/22 00:00

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	553308	TJL1	EET CAN	11/23/22 16:36

Client Sample ID: MW-66_111422

Lab Sample ID: 240-176531-2

Date Collected: 11/14/22 10:00

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	553308	TJL1	EET CAN	11/23/22 16:59
Total/NA	Analysis	8260D SIM		1	553480	CS	EET CAN	11/27/22 22:14

Client Sample ID: MW-65_111422

Lab Sample ID: 240-176531-3

Date Collected: 11/14/22 11:05

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	553308	TJL1	EET CAN	11/23/22 17:22
Total/NA	Analysis	8260D SIM		1	553221	CS	EET CAN	11/23/22 06:59

Client Sample ID: MW-44_111422

Lab Sample ID: 240-176531-4

Date Collected: 11/14/22 11:50

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		5	553308	TJL1	EET CAN	11/23/22 17:46
Total/NA	Analysis	8260D SIM		1	553221	CS	EET CAN	11/23/22 07:25

Client Sample ID: PW-16-01_111422

Lab Sample ID: 240-176531-5

Date Collected: 11/14/22 12:40

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		20	553308	TJL1	EET CAN	11/23/22 18:09
Total/NA	Analysis	8260D SIM		1	553221	CS	EET CAN	11/23/22 07:50

Client Sample ID: DUP-02

Lab Sample ID: 240-176531-6

Date Collected: 11/14/22 00:00

Matrix: Water

Date Received: 11/16/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	553308	TJL1	EET CAN	11/23/22 18:32
Total/NA	Analysis	8260D SIM		1	553221	CS	EET CAN	11/23/22 08:16

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-176531-1

Laboratory: Eurofins Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

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

Client Contact Company Name: Arcadis Address: 28550 Cabot Drive, Suite 500 City/State/Zip: Novi, MI, 48377 Phone: 248-994-2240		Regulatory program: <input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other	
Client Project Manager: Kris Hinskey Telephone: 248-994-2240 Email: kristoffer.hinskey@arcadis.com		Lab Contact: Mike DeMonico Telephone: 330-497-9396	
Sampler Name: Christina Guarido Method of Shipment/Carrier: Shipping/Tracking No:		Analyses Walk-in client Lab sampling Job/SDG No:	
Project Name: Ford LTP On-Site Project Number: 30146655.401.03 PO # 30146655.401.03		COC No: _____ of _____ For lab use only	
Analysis Turnaround Time TAT if different from below <input type="checkbox"/> 3 weeks <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Composite=C / Grab=G	
Containers & Preservatives HCl <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> NaOH <input type="checkbox"/> Other: _____ Upret <input type="checkbox"/>		Sample Specific Notes / Special Instructions: 1 Trip Blank 3 VOAs for 8260B 3 VOAs for 8260B SIM	
Matrix Air <input type="checkbox"/> Aqueous <input type="checkbox"/> Sediment <input type="checkbox"/> Solid <input type="checkbox"/> Other: _____		Sample Disposal <input type="checkbox"/> Return to C <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	
Sample Date Sample Time		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	
TRIP BLANK-209	---	NG	X X X X X X X
MW-66-11422	11/14/12 1000	NG	X X X X X X X
MW-65-11422	1105	NG	X X X X X X X
MW-44-11422	1150	NG	X X X X X X X
PW-16-01-11422	1240	NG	X X X X X X X
DUP-02	11/14/12	NG	X X X X X X X



Requested by: <i>Christina Guarido</i>	Date/Time: 11/14/12 1330	Received by: <i>Mwi Gold, Storage</i>	Date/Time: 11/14/12 1338
Requisitioned by: <i>John J. Havel</i>	Date/Time: 11/15/12 0900	Received by: <i>J. Havel</i>	Date/Time: 11/15/12 0900
Requisitioned by: <i>Christina Guarido</i>	Date/Time: 11/15/12 1140	Received in Laboratory by: <i>Christina Guarido</i>	Date/Time: 11-16-2012 0800

TestAmerica Laboratories, Inc. All rights reserved. Environmental Testing



Eurofins - Canton Sample Receipt Form/Narrative

Login # : _____

Barborton Facility

Client ARCADIS Site Name _____

Cooler unpacked by: Rachelle Haider

Cooler Received on 11-16-22 Opened on 11-16-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other

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

Eurofins 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-13 (CF +0.7 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN #IR-15 (CF 0.0 °C) Observed Cooler Temp. 3.9 °C Corrected Cooler Temp. 3.9 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1
 -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 NA
 -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 (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC286797
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 01042016 Yes No
17. 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 _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____

19. 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)

20. 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: _____

DATA VERIFICATION REPORT



December 04, 2022

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E203728

Project: Ford Livonia Transmission Plant - ON-SITE -Soil Gas, Ground water and Soil

Project number: 30146655.401.03- onsite groundwater

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Barberton

Laboratory submittal: 176531-1

Sample date: 2022-11-14

Report received by CADENA: 2022-12-02

Initial Data Verification completed by CADENA: 2022-12-04

Number of Samples:6

Sample Matrices: Water and trip blank

Test Categories:GCMS VOC

Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

The following minor QC exceptions or missing information were noted:

MS or MSD recoveries but not both or RPD only were outliers for the following analytes so results for the client sample spiked were not qualified based on these QC outliers alone: GCMS VOC sample -005 - vinyl chloride MSD recovery only biased low.

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

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.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

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 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 contaminants) 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 contaminants) 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.

Analytical Results Summary

CADENA Project ID: E203728

Laboratory: Eurofins Environment Testing LLC - Barberton

Laboratory Submittal: 176531-1

Analyte	Cas No.	Sample Name: TRIP BLANK_209				MW-66_111422				MW-65_111422				MW-44_111422				PW-16-01_111422				DUP-02			
		Result	Limit	Units	Valid Qualifier	Result	Limit	Units	Valid Qualifier	Result	Limit	Units	Valid Qualifier	Result	Limit	Units	Valid Qualifier	Result	Limit	Units	Valid Qualifier	Result	Limit	Units	Valid Qualifier
GC/MS VOC																									
<u>OSW-8260D</u>																									
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	20	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	3.9	1.0	ug/l	---	ND	5.0	ug/l	---	73	20	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	20	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	20	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	20	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	1.9	1.0	ug/l	---	8.3	1.0	ug/l	---	160	5.0	ug/l	---	930	20	ug/l	---	2.2	1.0	ug/l	---
<u>OSW-8260DSIM</u>																									
1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---	8.0	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---