

ANALYTICAL REPORT

PREPARED FOR

Attn: Kristoffer Hinskey
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Generated 3/29/2023 6:38:00 AM

JOB DESCRIPTION

Ford LTP - On Site

JOB NUMBER

240-181925-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the 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. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
3/29/2023 6:38:00 AM

Authorized for release by
Michael DeMonico, Project Manager I
Michael.DeMonico@et.eurofinsus.com
(330)497-9396



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	14
QC Sample Results	15
QC Association Summary	19
Lab Chronicle	20
Certification Summary	21
Chain of Custody	22

Definitions/Glossary

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

Job ID: 240-181925-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
▫	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: 240-181925-1

Job ID: 240-181925-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181925-1

Receipt

The samples were received on 3/15/2023 10:00 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 time was 4.2°C

GC/MS VOA

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

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

Method Summary

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

Job ID: 240-181925-1

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

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

Sample Summary

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

Job ID: 240-181925-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181925-1	TRIP BLANK_31	Water	03/14/23 00:00	03/15/23 10:00
240-181925-2	MW-47_031423	Water	03/14/23 09:37	03/15/23 10:00
240-181925-3	MW-71_031423	Water	03/14/23 10:43	03/15/23 10:00
240-181925-4	MW-70_031423	Water	03/14/23 11:48	03/15/23 10:00
240-181925-5	MW-45_031423	Water	03/14/23 13:05	03/15/23 10:00

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

Detection Summary

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

Job ID: 240-181925-1

Client Sample ID: TRIP BLANK_31

Lab Sample ID: 240-181925-1

No Detections.

Client Sample ID: MW-47_031423

Lab Sample ID: 240-181925-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.7		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.51	ug/L	1		8260D	Total/NA
Vinyl chloride	28		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-71_031423

Lab Sample ID: 240-181925-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.82	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MW-70_031423

Lab Sample ID: 240-181925-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	150		10	4.6	ug/L	10		8260D	Total/NA
Vinyl chloride	520		10	4.5	ug/L	10		8260D	Total/NA

Client Sample ID: MW-45_031423

Lab Sample ID: 240-181925-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	69		10	4.6	ug/L	10		8260D	Total/NA
Vinyl chloride	560		10	4.5	ug/L	10		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: 240-181925-1

Client Sample ID: TRIP BLANK_31

Lab Sample ID: 240-181925-1

Date Collected: 03/14/23 00:00

Matrix: Water

Date Received: 03/15/23 10:00

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			03/21/23 18:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/23 18:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 18:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/23 18:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 18:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/23 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		62 - 137		03/21/23 18:20	1
4-Bromofluorobenzene (Surr)	83		56 - 136		03/21/23 18:20	1
Toluene-d8 (Surr)	88		78 - 122		03/21/23 18:20	1
Dibromofluoromethane (Surr)	103		73 - 120		03/21/23 18:20	1

Client Sample Results

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

Job ID: 240-181925-1

Client Sample ID: MW-47_031423

Lab Sample ID: 240-181925-2

Date Collected: 03/14/23 09:37

Matrix: Water

Date Received: 03/15/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.7	J	2.0	0.86	ug/L			03/18/23 11:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 120					03/18/23 11:55	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			03/21/23 20:42	1
cis-1,2-Dichloroethene	7.7		1.0	0.46	ug/L			03/21/23 20:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 20:42	1
trans-1,2-Dichloroethene	1.4		1.0	0.51	ug/L			03/21/23 20:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 20:42	1
Vinyl chloride	28		1.0	0.45	ug/L			03/21/23 20:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		62 - 137					03/21/23 20:42	1
4-Bromofluorobenzene (Surr)	82		56 - 136					03/21/23 20:42	1
Toluene-d8 (Surr)	86		78 - 122					03/21/23 20:42	1
Dibromofluoromethane (Surr)	104		73 - 120					03/21/23 20:42	1

Client Sample Results

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

Job ID: 240-181925-1

Client Sample ID: MW-71_031423

Lab Sample ID: 240-181925-3

Date Collected: 03/14/23 10:43

Matrix: Water

Date Received: 03/15/23 10:00

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			03/18/23 12:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 120					03/18/23 12:20	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			03/22/23 15:28	1
cis-1,2-Dichloroethene	0.82	J	1.0	0.46	ug/L			03/22/23 15:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/23 15:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/23 15:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/23 15:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/22/23 15:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		62 - 137					03/22/23 15:28	1
4-Bromofluorobenzene (Surr)	88		56 - 136					03/22/23 15:28	1
Toluene-d8 (Surr)	95		78 - 122					03/22/23 15:28	1
Dibromofluoromethane (Surr)	115		73 - 120					03/22/23 15:28	1

Client Sample Results

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

Job ID: 240-181925-1

Client Sample ID: MW-70_031423

Lab Sample ID: 240-181925-4

Date Collected: 03/14/23 11:48

Matrix: Water

Date Received: 03/15/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.4		2.0	0.86	ug/L			03/18/23 12:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		66 - 120					03/18/23 12:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	10	U	10	4.9	ug/L			03/22/23 15:52	10
cis-1,2-Dichloroethene	150		10	4.6	ug/L			03/22/23 15:52	10
Tetrachloroethene	10	U	10	4.4	ug/L			03/22/23 15:52	10
trans-1,2-Dichloroethene	10	U	10	5.1	ug/L			03/22/23 15:52	10
Trichloroethene	10	U	10	4.4	ug/L			03/22/23 15:52	10
Vinyl chloride	520		10	4.5	ug/L			03/22/23 15:52	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137					03/22/23 15:52	10
4-Bromofluorobenzene (Surr)	88		56 - 136					03/22/23 15:52	10
Toluene-d8 (Surr)	95		78 - 122					03/22/23 15:52	10
Dibromofluoromethane (Surr)	114		73 - 120					03/22/23 15:52	10

Client Sample Results

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

Job ID: 240-181925-1

Client Sample ID: MW-45_031423

Lab Sample ID: 240-181925-5

Date Collected: 03/14/23 13:05

Matrix: Water

Date Received: 03/15/23 10:00

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			03/18/23 13:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		66 - 120					03/18/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	10	U	10	4.9	ug/L			03/22/23 16:16	10
cis-1,2-Dichloroethene	69		10	4.6	ug/L			03/22/23 16:16	10
Tetrachloroethene	10	U	10	4.4	ug/L			03/22/23 16:16	10
trans-1,2-Dichloroethene	10	U	10	5.1	ug/L			03/22/23 16:16	10
Trichloroethene	10	U	10	4.4	ug/L			03/22/23 16:16	10
Vinyl chloride	560		10	4.5	ug/L			03/22/23 16:16	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137					03/22/23 16:16	10
4-Bromofluorobenzene (Surr)	89		56 - 136					03/22/23 16:16	10
Toluene-d8 (Surr)	94		78 - 122					03/22/23 16:16	10
Dibromofluoromethane (Surr)	116		73 - 120					03/22/23 16:16	10

Surrogate Summary

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

Job ID: 240-181925-1

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)
240-181849-B-2 MS	Matrix Spike	96	99	98	103
240-181849-B-2 MSD	Matrix Spike Duplicate	94	98	97	100
240-181925-1	TRIP BLANK_31	95	83	88	103
240-181925-2	MW-47_031423	96	82	86	104
240-181925-3	MW-71_031423	106	88	95	115
240-181925-4	MW-70_031423	104	88	95	114
240-181925-5	MW-45_031423	107	89	94	116
240-182236-E-3 MSD	Matrix Spike Duplicate	89	94	94	95
240-182236-H-3 MS	Matrix Spike	87	94	93	95
LCS 240-566163/5	Lab Control Sample	89	97	96	97
LCS 240-566349/5	Lab Control Sample	97	105	104	105
LCS 240-566349/6	Lab Control Sample	97	100	96	104
MB 240-566163/8	Method Blank	93	85	91	103
MB 240-566349/8	Method Blank	105	92	96	112

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)
240-181766-L-4 MS	Matrix Spike	84
240-181766-O-4 MSD	Matrix Spike Duplicate	82
240-181925-2	MW-47_031423	88
240-181925-3	MW-71_031423	86
240-181925-4	MW-70_031423	96
240-181925-5	MW-45_031423	90
LCS 240-565901/4	Lab Control Sample	83
MB 240-565901/6	Method Blank	89

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-181925-1

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

Lab Sample ID: MB 240-566163/8
Matrix: Water
Analysis Batch: 566163

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/23 11:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/23 11:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 11:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/23 11:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/23 11:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/23 11:37	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	93		62 - 137		03/21/23 11:37	1
4-Bromofluorobenzene (Surr)	85		56 - 136		03/21/23 11:37	1
Toluene-d8 (Surr)	91		78 - 122		03/21/23 11:37	1
Dibromofluoromethane (Surr)	103		73 - 120		03/21/23 11:37	1

Lab Sample ID: LCS 240-566163/5
Matrix: Water
Analysis Batch: 566163

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	25.0	25.5		ug/L		102	63 - 134
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	77 - 123
Tetrachloroethene	25.0	26.8		ug/L		107	76 - 123
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	75 - 124
Trichloroethene	25.0	24.3		ug/L		97	70 - 122
Vinyl chloride	12.5	12.2		ug/L		98	60 - 144

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	96		78 - 122
Dibromofluoromethane (Surr)	97		73 - 120

Lab Sample ID: 240-182236-E-3 MSD
Matrix: Water
Analysis Batch: 566163

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

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
1,1-Dichloroethene	1.0	U	25.0	24.8		ug/L		99	56 - 135	6	26
cis-1,2-Dichloroethene	1.0	U	25.0	24.1		ug/L		97	66 - 128	8	14
Tetrachloroethene	1.0	U	25.0	26.3		ug/L		105	62 - 131	6	20
trans-1,2-Dichloroethene	1.0	U	25.0	23.8		ug/L		95	56 - 136	7	15
Trichloroethene	1.0	U	25.0	24.5		ug/L		98	61 - 124	8	15
Vinyl chloride	1.0	U	12.5	11.9		ug/L		96	43 - 157	15	24

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	94		78 - 122

QC Sample Results

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

Job ID: 240-181925-1

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

Lab Sample ID: 240-182236-E-3 MSD
Matrix: Water
Analysis Batch: 566163

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

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	95		73 - 120

Lab Sample ID: 240-182236-H-3 MS
Matrix: Water
Analysis Batch: 566163

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethene	1.0	U	25.0	23.4		ug/L		94	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	22.3		ug/L		89	66 - 128
Tetrachloroethene	1.0	U	25.0	24.7		ug/L		99	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	22.3		ug/L		89	56 - 136
Trichloroethene	1.0	U	25.0	22.6		ug/L		91	61 - 124
Vinyl chloride	1.0	U	12.5	10.3		ug/L		82	43 - 157

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	93		78 - 122
Dibromofluoromethane (Surr)	95		73 - 120

Lab Sample ID: MB 240-566349/8
Matrix: Water
Analysis Batch: 566349

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/23 12:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/22/23 12:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/23 12:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/23 12:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/23 12:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/22/23 12:42	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	105		62 - 137		03/22/23 12:42	1
4-Bromofluorobenzene (Surr)	92		56 - 136		03/22/23 12:42	1
Toluene-d8 (Surr)	96		78 - 122		03/22/23 12:42	1
Dibromofluoromethane (Surr)	112		73 - 120		03/22/23 12:42	1

Lab Sample ID: LCS 240-566349/5
Matrix: Water
Analysis Batch: 566349

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	25.0	24.9		ug/L		100	63 - 134
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	77 - 123
Tetrachloroethene	25.0	27.3		ug/L		109	76 - 123
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	75 - 124
Trichloroethene	25.0	24.5		ug/L		98	70 - 122

Eurofins Canton

QC Sample Results

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

Job ID: 240-181925-1

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

Lab Sample ID: LCS 240-566349/5

Matrix: Water

Analysis Batch: 566349

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	12.5	11.9		ug/L		95	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	105		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	105		73 - 120

Lab Sample ID: LCS 240-566349/6

Matrix: Water

Analysis Batch: 566349

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	100		56 - 136
Toluene-d8 (Surr)	96		78 - 122
Dibromofluoromethane (Surr)	104		73 - 120

Lab Sample ID: 240-181849-B-2 MS

Matrix: Water

Analysis Batch: 566349

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	63	U	1560	1500		ug/L		96	56 - 135
cis-1,2-Dichloroethene	3700		1560	4920	E	ug/L		81	66 - 128
Tetrachloroethene	63	U	1560	1590		ug/L		102	62 - 131
trans-1,2-Dichloroethene	77		1560	1540		ug/L		94	56 - 136
Trichloroethene	63	U	1560	1470		ug/L		94	61 - 124
Vinyl chloride	110		781	806		ug/L		89	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		62 - 137
4-Bromofluorobenzene (Surr)	99		56 - 136
Toluene-d8 (Surr)	98		78 - 122
Dibromofluoromethane (Surr)	103		73 - 120

Lab Sample ID: 240-181849-B-2 MSD

Matrix: Water

Analysis Batch: 566349

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	63	U	1560	1550		ug/L		99	56 - 135	4	26
cis-1,2-Dichloroethene	3700		1560	4990	E	ug/L		86	66 - 128	1	14
Tetrachloroethene	63	U	1560	1680		ug/L		108	62 - 131	5	20
trans-1,2-Dichloroethene	77		1560	1620		ug/L		99	56 - 136	5	15
Trichloroethene	63	U	1560	1550		ug/L		99	61 - 124	5	15
Vinyl chloride	110		781	851		ug/L		95	43 - 157	5	24

Eurofins Canton

QC Sample Results

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

Job ID: 240-181925-1

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

Lab Sample ID: 240-181849-B-2 MSD
Matrix: Water
Analysis Batch: 566349

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

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	94		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	100		73 - 120

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

Lab Sample ID: MB 240-565901/6
Matrix: Water
Analysis Batch: 565901

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/18/23 09:54	1
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac			
%Recovery	Qualifier								
1,2-Dichloroethane-d4 (Surr)	89		66 - 120		03/18/23 09:54	1			

Lab Sample ID: LCS 240-565901/4
Matrix: Water
Analysis Batch: 565901

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,4-Dioxane	10.0	9.37		ug/L		94	80 - 122
Surrogate	LCS LCS		Limits				
%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	83		66 - 120				

Lab Sample ID: 240-181766-L-4 MS
Matrix: Water
Analysis Batch: 565901

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1,4-Dioxane	0.92	J	10.0	13.8		ug/L		129	51 - 153
Surrogate	MS MS		Limits						
%Recovery	Qualifier								
1,2-Dichloroethane-d4 (Surr)	84		66 - 120						

Lab Sample ID: 240-181766-O-4 MSD
Matrix: Water
Analysis Batch: 565901

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	Limit
				Result	Qualifier						
1,4-Dioxane	0.92	J	10.0	13.3		ug/L		124	51 - 153	4	16
Surrogate	MSD MSD		Limits								
%Recovery	Qualifier										
1,2-Dichloroethane-d4 (Surr)	82		66 - 120								

QC Association Summary

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

Job ID: 240-181925-1

GC/MS VOA

Analysis Batch: 565901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181925-2	MW-47_031423	Total/NA	Water	8260D SIM	
240-181925-3	MW-71_031423	Total/NA	Water	8260D SIM	
240-181925-4	MW-70_031423	Total/NA	Water	8260D SIM	
240-181925-5	MW-45_031423	Total/NA	Water	8260D SIM	
MB 240-565901/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-565901/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-181766-L-4 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-181766-O-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 566163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181925-1	TRIP BLANK_31	Total/NA	Water	8260D	
240-181925-2	MW-47_031423	Total/NA	Water	8260D	
MB 240-566163/8	Method Blank	Total/NA	Water	8260D	
LCS 240-566163/5	Lab Control Sample	Total/NA	Water	8260D	
240-182236-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	
240-182236-H-3 MS	Matrix Spike	Total/NA	Water	8260D	

Analysis Batch: 566349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181925-3	MW-71_031423	Total/NA	Water	8260D	
240-181925-4	MW-70_031423	Total/NA	Water	8260D	
240-181925-5	MW-45_031423	Total/NA	Water	8260D	
MB 240-566349/8	Method Blank	Total/NA	Water	8260D	
LCS 240-566349/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 240-566349/6	Lab Control Sample	Total/NA	Water	8260D	
240-181849-B-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-181849-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	



Lab Chronicle

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

Job ID: 240-181925-1

Client Sample ID: TRIP BLANK_31

Lab Sample ID: 240-181925-1

Date Collected: 03/14/23 00:00

Matrix: Water

Date Received: 03/15/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	566163	HMB	EET CAN	03/21/23 18:20

Client Sample ID: MW-47_031423

Lab Sample ID: 240-181925-2

Date Collected: 03/14/23 09:37

Matrix: Water

Date Received: 03/15/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	566163	HMB	EET CAN	03/21/23 20:42
Total/NA	Analysis	8260D SIM		1	565901	BAJ	EET CAN	03/18/23 11:55

Client Sample ID: MW-71_031423

Lab Sample ID: 240-181925-3

Date Collected: 03/14/23 10:43

Matrix: Water

Date Received: 03/15/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	566349	HMB	EET CAN	03/22/23 15:28
Total/NA	Analysis	8260D SIM		1	565901	BAJ	EET CAN	03/18/23 12:20

Client Sample ID: MW-70_031423

Lab Sample ID: 240-181925-4

Date Collected: 03/14/23 11:48

Matrix: Water

Date Received: 03/15/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	566349	HMB	EET CAN	03/22/23 15:52
Total/NA	Analysis	8260D SIM		1	565901	BAJ	EET CAN	03/18/23 12:44

Client Sample ID: MW-45_031423

Lab Sample ID: 240-181925-5

Date Collected: 03/14/23 13:05

Matrix: Water

Date Received: 03/15/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	566349	HMB	EET CAN	03/22/23 16:16
Total/NA	Analysis	8260D SIM		1	565901	BAJ	EET CAN	03/18/23 13:08

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: 240-181925-1

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	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	03-22-23
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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



TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-228-2763

Client Contact Company Name: Arcadis Address: 28550 Cabot Drive, Suite 500 City/State/Zip: Novi, MI, 48377 Phone: 248-994-2240 Project Name: Ford LTP On-Site Project Number: 30167538.401.03 PO # 30167538.401.03		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: kristoffr.hinskey@arcadis.com		Lab Contact: Mike DeMonico Telephone: 330-497-9396																		
Sampler Name: Sommer Guy Method of Shipment/Carrier: Shipping/Tracking No:		Analysis Turnaround Time TAT if different from below 10 day <input checked="" type="checkbox"/> 3 weeks 1 week <input type="checkbox"/> 2 days 1 day <input type="checkbox"/>																		
Matrix Air <input type="checkbox"/> Sediment <input type="checkbox"/> Solid <input type="checkbox"/> Other:		Containers & Preservatives H2SO4 <input type="checkbox"/> HNO3 <input type="checkbox"/> HCl <input type="checkbox"/> NaOH <input type="checkbox"/> ZnO <input type="checkbox"/> Uptre: <input type="checkbox"/> Other:																		
Sample Identification Sample Date Sample Time		Filtered Sample (Y/N) Composite C/Grab <input type="checkbox"/>																		
✓ TRIP BLANK_ 31	---	1	NG X	1,1-DCE 8260B	X	Trans-1,2-DCE 8260B	X	PCE 8260B	X	TCE 8260B	X	Vinyl Chloride 8260B	X	1,4-Dioxane 8260B SIM						
✓ MW-47-031423	3/14/23	0937	6	NG X	X	X	X	X	X	X	X	X	X	X						
✓ MW-71-031423	3/14/23	1043	6	NG X	X	X	X	X	X	X	X	X	X	X						
✓ MW-70-031423	3/14/23	1148	6	NG X	X	X	X	X	X	X	X	X	X	X						
✓ MW-45-031423	3/14/23	1305	6	NG X	X	X	X	X	X	X	X	X	X	X						
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																		
Special Instructions/QC Requirements & Comments: Submit all results through Cadena at jtomalis@cadenaco.com. Cadena #E203728 Level IV Reporting requested.																				
Relinquished by: Sommer Guy		Company: Arcadis																		
Relinquished by: Guy		Company: EENA																		
Relinquished by: Guy		Company: EENA																		
Relinquished by: Guy		Company: EENA																		



©2019, TestAmerica Laboratories, Inc. All rights reserved. TestAmerica is a registered trademark of TestAmerica Laboratories, Inc.

Barberton Facility

Client Arcadis Site Name Cooler unpacked by: M. Loan
Cooler Received on 3-15-23 Opened on 3-15-23
FedEx: 1st Grd Exp. UPS FAS Clipper Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # 22 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 -0.2°C) Observed Cooler Temp. 4.4°C Corrected Cooler Temp. 4.2°C
IR GUN # IR-16 (CF -0.1°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN # IR-17 (CF -0.3°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 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 (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)?
- 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
If yes, Questions 13-17 have been checked at the originating laboratory.
- 13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC293086
- 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 # 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



March 29, 2023

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: 30167538.401.03- onsite groundwater
Event Specific Scope of Work References: Sample COC
Laboratory: Eurofins Environment Testing LLC - Barberton
Laboratory submittal: 181925-1
Sample date: 2023-03-14
Report received by CADENA: 2023-03-29
Initial Data Verification completed by CADENA: 2023-03-29
Number of Samples:5
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

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.

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 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 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: 181925-1

Analyte	Cas No.	Sample Name: TRIP BLANK_31				Sample Name: MW-47_031423				Sample Name: MW-71_031423				Sample Name: MW-70_031423				Sample Name: MW-45_031423			
		Result	Limit	Units	Valid	Result	Limit	Units	Valid	Result	Limit	Units	Valid	Result	Limit	Units	Valid	Result	Limit	Units	Valid
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	10	ug/l	---	ND	10	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	7.7	1.0	ug/l	---	0.82	1.0	ug/l	J	150	10	ug/l	---	69	10	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	1.4	1.0	ug/l	---	ND	1.0	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	28	1.0	ug/l	---	ND	1.0	ug/l	---	520	10	ug/l	---	560	10	ug/l	---
<u>OSW-8260DSIM</u>																					
1,4-Dioxane	123-91-1					1.7	2.0	ug/l	J	ND	2.0	ug/l	---	2.4	2.0	ug/l	---	ND	2.0	ug/l	---