

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

Ford LTP - On Site

JOB NUMBER

240-195683-1

Eurofins Cleveland

Job Notes

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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



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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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 US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Job ID: 240-195683-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-195683-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 11/17/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.7°C, 2.9°C and 3.5°C

GC/MS VOA

Method 8260D: The method requirement for no headspace was not met. The following volatile samples were analyzed with headspace in the sample container(s): MW-40_111323 (240-195683-5) and MW-31_111323 (240-195683-6).

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



Method Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

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

Protocol References:

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

Laboratory References:

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

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- 13
- 14

Sample Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-195683-1	TRIP BLANK_92	Water	11/13/23 00:00	11/17/23 09:40
240-195683-2	MW-47_111323	Water	11/13/23 09:15	11/17/23 09:40
240-195683-3	MW-46_111323	Water	11/13/23 10:26	11/17/23 09:40
240-195683-4	MW-70_111323	Water	11/13/23 11:37	11/17/23 09:40
240-195683-5	MW-40_111323	Water	11/13/23 13:05	11/17/23 09:40
240-195683-6	MW-31_111323	Water	11/13/23 14:14	11/17/23 09:40

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- 11
- 12
- 13
- 14

Detection Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: TRIP BLANK_92

Lab Sample ID: 240-195683-1

No Detections.

Client Sample ID: MW-47_111323

Lab Sample ID: 240-195683-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.0		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.6		1.0	0.51	ug/L	1		8260D	Total/NA
Vinyl chloride	23		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-46_111323

Lab Sample ID: 240-195683-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.54	J	1.0	0.51	ug/L	1		8260D	Total/NA
Vinyl chloride	9.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-70_111323

Lab Sample ID: 240-195683-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	140		13	5.8	ug/L	12.5		8260D	Total/NA
Vinyl chloride	380		13	5.6	ug/L	12.5		8260D	Total/NA

Client Sample ID: MW-40_111323

Lab Sample ID: 240-195683-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.93	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-31_111323

Lab Sample ID: 240-195683-6

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: TRIP BLANK_92

Lab Sample ID: 240-195683-1

Date Collected: 11/13/23 00:00

Matrix: Water

Date Received: 11/17/23 09:40

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			11/21/23 14:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/21/23 14:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 14:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/21/23 14:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 14:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/21/23 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		62 - 137		11/21/23 14:29	1
4-Bromofluorobenzene (Surr)	72		56 - 136		11/21/23 14:29	1
Toluene-d8 (Surr)	86		78 - 122		11/21/23 14:29	1
Dibromofluoromethane (Surr)	89		73 - 120		11/21/23 14:29	1

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: MW-47_111323

Lab Sample ID: 240-195683-2

Date Collected: 11/13/23 09:15

Matrix: Water

Date Received: 11/17/23 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2	J	2.0	0.86	ug/L			11/25/23 07:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 120					11/25/23 07:30	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			11/21/23 17:49	1
cis-1,2-Dichloroethene	8.0		1.0	0.46	ug/L			11/21/23 17:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 17:49	1
trans-1,2-Dichloroethene	1.6		1.0	0.51	ug/L			11/21/23 17:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 17:49	1
Vinyl chloride	23		1.0	0.45	ug/L			11/21/23 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137					11/21/23 17:49	1
4-Bromofluorobenzene (Surr)	72		56 - 136					11/21/23 17:49	1
Toluene-d8 (Surr)	84		78 - 122					11/21/23 17:49	1
Dibromofluoromethane (Surr)	93		73 - 120					11/21/23 17:49	1

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: MW-46_111323

Lab Sample ID: 240-195683-3

Date Collected: 11/13/23 10:26

Matrix: Water

Date Received: 11/17/23 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.7		2.0	0.86	ug/L			11/25/23 07:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 120					11/25/23 07:54	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			11/21/23 18:14	1
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L			11/21/23 18:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 18:14	1
trans-1,2-Dichloroethene	0.54	J	1.0	0.51	ug/L			11/21/23 18:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 18:14	1
Vinyl chloride	9.0		1.0	0.45	ug/L			11/21/23 18:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		62 - 137					11/21/23 18:14	1
4-Bromofluorobenzene (Surr)	83		56 - 136					11/21/23 18:14	1
Toluene-d8 (Surr)	99		78 - 122					11/21/23 18:14	1
Dibromofluoromethane (Surr)	104		73 - 120					11/21/23 18:14	1

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: MW-70_111323

Lab Sample ID: 240-195683-4

Date Collected: 11/13/23 11:37

Matrix: Water

Date Received: 11/17/23 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.1		2.0	0.86	ug/L			11/25/23 08:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 120					11/25/23 08:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	13	U	13	6.1	ug/L			11/21/23 21:34	12.5
cis-1,2-Dichloroethene	140		13	5.8	ug/L			11/21/23 21:34	12.5
Tetrachloroethene	13	U	13	5.5	ug/L			11/21/23 21:34	12.5
trans-1,2-Dichloroethene	13	U	13	6.4	ug/L			11/21/23 21:34	12.5
Trichloroethene	13	U	13	5.5	ug/L			11/21/23 21:34	12.5
Vinyl chloride	380		13	5.6	ug/L			11/21/23 21:34	12.5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		62 - 137					11/21/23 21:34	12.5
4-Bromofluorobenzene (Surr)	94		56 - 136					11/21/23 21:34	12.5
Toluene-d8 (Surr)	91		78 - 122					11/21/23 21:34	12.5
Dibromofluoromethane (Surr)	109		73 - 120					11/21/23 21:34	12.5

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: MW-40_111323

Lab Sample ID: 240-195683-5

Date Collected: 11/13/23 13:05

Matrix: Water

Date Received: 11/17/23 09:40

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			11/25/23 08:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		66 - 120					11/25/23 08:42	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			11/21/23 18:39	1
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L			11/21/23 18:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 18:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/21/23 18:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 18:39	1
Vinyl chloride	0.93	J	1.0	0.45	ug/L			11/21/23 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		62 - 137					11/21/23 18:39	1
4-Bromofluorobenzene (Surr)	71		56 - 136					11/21/23 18:39	1
Toluene-d8 (Surr)	83		78 - 122					11/21/23 18:39	1
Dibromofluoromethane (Surr)	93		73 - 120					11/21/23 18:39	1

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: MW-31_111323

Lab Sample ID: 240-195683-6

Date Collected: 11/13/23 14:14

Matrix: Water

Date Received: 11/17/23 09:40

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			11/25/23 09:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 120					11/25/23 09:06	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			11/21/23 19:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/21/23 19:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 19:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/21/23 19:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 19:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/21/23 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		62 - 137					11/21/23 19:04	1
4-Bromofluorobenzene (Surr)	70		56 - 136					11/21/23 19:04	1
Toluene-d8 (Surr)	85		78 - 122					11/21/23 19:04	1
Dibromofluoromethane (Surr)	92		73 - 120					11/21/23 19:04	1

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

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)
240-195683-1	TRIP BLANK_92	100	72	86	89
240-195683-2	MW-47_111323	104	72	84	93
240-195683-3	MW-46_111323	118	83	99	104
240-195683-4	MW-70_111323	126	94	91	109
240-195683-5	MW-40_111323	106	71	83	93
240-195683-6	MW-31_111323	103	70	85	92
240-195686-C-5 MS	Matrix Spike	100	82	87	96
240-195686-E-5 MSD	Matrix Spike Duplicate	108	90	96	103
LCS 240-595424/5	Lab Control Sample	93	78	84	89
MB 240-595424/8	Method Blank	102	76	88	92

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)
240-195683-2	MW-47_111323	97
240-195683-3	MW-46_111323	97
240-195683-4	MW-70_111323	97
240-195683-5	MW-40_111323	96
240-195683-6	MW-31_111323	97
500-242543-C-3 MS	Matrix Spike	99
500-242543-C-3 MSD	Matrix Spike Duplicate	100
LCS 240-595687/4	Lab Control Sample	97
MB 240-595687/6	Method Blank	97

Surrogate Legend

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

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

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

Lab Sample ID: MB 240-595424/8

Matrix: Water

Analysis Batch: 595424

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			11/21/23 13:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/21/23 13:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 13:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/21/23 13:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/21/23 13:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/21/23 13:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		62 - 137		11/21/23 13:39	1
4-Bromofluorobenzene (Surr)	76		56 - 136		11/21/23 13:39	1
Toluene-d8 (Surr)	88		78 - 122		11/21/23 13:39	1
Dibromofluoromethane (Surr)	92		73 - 120		11/21/23 13:39	1

Lab Sample ID: LCS 240-595424/5

Matrix: Water

Analysis Batch: 595424

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	26.3		ug/L		105	63 - 134
cis-1,2-Dichloroethene	25.0	22.5		ug/L		90	77 - 123
Tetrachloroethene	25.0	25.6		ug/L		102	76 - 123
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	75 - 124
Trichloroethene	25.0	24.4		ug/L		97	70 - 122
Vinyl chloride	12.5	11.5		ug/L		92	60 - 144

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	93		62 - 137
4-Bromofluorobenzene (Surr)	78		56 - 136
Toluene-d8 (Surr)	84		78 - 122
Dibromofluoromethane (Surr)	89		73 - 120

Lab Sample ID: 240-195686-C-5 MS

Matrix: Water

Analysis Batch: 595424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	1.0	U	25.0	24.5		ug/L		98	56 - 135
cis-1,2-Dichloroethene	1.0		25.0	22.9		ug/L		87	66 - 128
Tetrachloroethene	1.0	U	25.0	24.8		ug/L		99	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	22.6		ug/L		90	56 - 136
Trichloroethene	1.0	U	25.0	23.8		ug/L		95	61 - 124
Vinyl chloride	1.1		12.5	10.7		ug/L		77	43 - 157

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	82		56 - 136
Toluene-d8 (Surr)	87		78 - 122

Eurofins Cleveland

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

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

Lab Sample ID: 240-195686-C-5 MS
Matrix: Water
Analysis Batch: 595424

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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	96		73 - 120

Lab Sample ID: 240-195686-E-5 MSD
Matrix: Water
Analysis Batch: 595424

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

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1-Dichloroethene	1.0	U	25.0	26.9		ug/L		107	56 - 135	9	26
cis-1,2-Dichloroethene	1.0		25.0	23.7		ug/L		91	66 - 128	3	14
Tetrachloroethene	1.0	U	25.0	26.2		ug/L		105	62 - 131	6	20
trans-1,2-Dichloroethene	1.0	U	25.0	24.1		ug/L		96	56 - 136	7	15
Trichloroethene	1.0	U	25.0	25.3		ug/L		101	61 - 124	6	15
Vinyl chloride	1.1		12.5	12.3		ug/L		90	43 - 157	14	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		62 - 137
4-Bromofluorobenzene (Surr)	90		56 - 136
Toluene-d8 (Surr)	96		78 - 122
Dibromofluoromethane (Surr)	103		73 - 120

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

Lab Sample ID: MB 240-595687/6
Matrix: Water
Analysis Batch: 595687

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			11/25/23 02:18	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1,2-Dichloroethane-d4 (Surr)	97		66 - 120		11/25/23 02:18	1

Lab Sample ID: LCS 240-595687/4
Matrix: Water
Analysis Batch: 595687

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
1,4-Dioxane	10.0	10.1		ug/L		101	80 - 122

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 120

Lab Sample ID: 500-242543-C-3 MS
Matrix: Water
Analysis Batch: 595687

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
1,4-Dioxane	0.90	J F1	30.0	11.7	F1	ug/L		36	51 - 153

Eurofins Cleveland

QC Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	99		66 - 120

Lab Sample ID: 500-242543-C-3 MSD
 Matrix: Water
 Analysis Batch: 595687

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	0.90	J F1	30.0	11.1	F1	ug/L		34	51 - 153	5	16

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	100		66 - 120

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

QC Association Summary

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

GC/MS VOA

Analysis Batch: 595424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195683-1	TRIP BLANK_92	Total/NA	Water	8260D	
240-195683-2	MW-47_111323	Total/NA	Water	8260D	
240-195683-3	MW-46_111323	Total/NA	Water	8260D	
240-195683-4	MW-70_111323	Total/NA	Water	8260D	
240-195683-5	MW-40_111323	Total/NA	Water	8260D	
240-195683-6	MW-31_111323	Total/NA	Water	8260D	
MB 240-595424/8	Method Blank	Total/NA	Water	8260D	
LCS 240-595424/5	Lab Control Sample	Total/NA	Water	8260D	
240-195686-C-5 MS	Matrix Spike	Total/NA	Water	8260D	
240-195686-E-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 595687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195683-2	MW-47_111323	Total/NA	Water	8260D SIM	
240-195683-3	MW-46_111323	Total/NA	Water	8260D SIM	
240-195683-4	MW-70_111323	Total/NA	Water	8260D SIM	
240-195683-5	MW-40_111323	Total/NA	Water	8260D SIM	
240-195683-6	MW-31_111323	Total/NA	Water	8260D SIM	
MB 240-595687/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-595687/4	Lab Control Sample	Total/NA	Water	8260D SIM	
500-242543-C-3 MS	Matrix Spike	Total/NA	Water	8260D SIM	
500-242543-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	



Lab Chronicle

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Client Sample ID: TRIP BLANK_92

Lab Sample ID: 240-195683-1

Date Collected: 11/13/23 00:00

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	595424	MRL	EET CLE	11/21/23 14:29

Client Sample ID: MW-47_111323

Lab Sample ID: 240-195683-2

Date Collected: 11/13/23 09:15

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	595424	MRL	EET CLE	11/21/23 17:49
Total/NA	Analysis	8260D SIM		1	595687	CS	EET CLE	11/25/23 07:30

Client Sample ID: MW-46_111323

Lab Sample ID: 240-195683-3

Date Collected: 11/13/23 10:26

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	595424	MRL	EET CLE	11/21/23 18:14
Total/NA	Analysis	8260D SIM		1	595687	CS	EET CLE	11/25/23 07:54

Client Sample ID: MW-70_111323

Lab Sample ID: 240-195683-4

Date Collected: 11/13/23 11:37

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		12.5	595424	MRL	EET CLE	11/21/23 21:34
Total/NA	Analysis	8260D SIM		1	595687	CS	EET CLE	11/25/23 08:18

Client Sample ID: MW-40_111323

Lab Sample ID: 240-195683-5

Date Collected: 11/13/23 13:05

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	595424	MRL	EET CLE	11/21/23 18:39
Total/NA	Analysis	8260D SIM		1	595687	CS	EET CLE	11/25/23 08:42

Client Sample ID: MW-31_111323

Lab Sample ID: 240-195683-6

Date Collected: 11/13/23 14:14

Matrix: Water

Date Received: 11/17/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	595424	MRL	EET CLE	11/21/23 19:04
Total/NA	Analysis	8260D SIM		1	595687	CS	EET CLE	11/25/23 09:06

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-195683-1

Laboratory: Eurofins Cleveland

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	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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



Chain of Custody Record

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

Regulatory program: DW NPDES RCRA Other

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

Client Project Manager: Kris Hinskey
 Telephone: 248-994-2240
 Email: krisstoffer.hinskey@arcadis.com

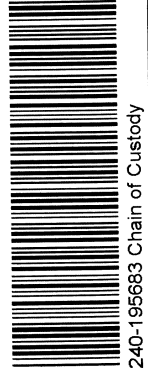
Site Contact: Christina Weaver
 Telephone: 248-994-2240

Lab Contact: Mike DeMonico
 Telephone: 330-497-9396

Sampler Name: Garrett Link
 Method of Shipment/Carrier:
 Shipping/Tracking No:

Analysis Turnaround Time
 TAT if different from below
 3 weeks
 2 weeks
 1 week
 2 days
 1 day
 10 day

Sample Identification	Sample Date	Sample Time	Matrix				Containers & Preservatives						Filtered Sample (Y/N)	Composite C/Grab/G	Analyses					Sample Specific Notes / Special Instructions				
			Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc			NaOH	Umpres	Other:	1,1-DCE 8260B	cis-1,2-DCE 8260B		Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B
TRIP BLANK_ 92	11/13/23	---	1																					1 Trip Blank
MW-47-111323	11/23/23	915	6																					3 VOAs for 8260B 3 VOAs for 8260B SIM
MW-416-111323	11/13/23	1026	6																					
MW-78-111323	11/13/23	1137	6																					
MW-410-111323	11/13/23	1305	6																					
MW-31-111323	11/13/23	1414	6																					



Possible Hazard Identification
 Non-Hazard Flammable 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

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
 Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>Garrett Link</i>	ARCADIS	11/13/23 1500	Novi Cold Storage	ARCADIS	11/13/23 1500
<i>Garrett Link</i>	Arcadis	11/16/23 0815	<i>ON SITE</i>	EETA	11/16/23 1015
<i>Garrett Link</i>	EETA	11/16/23 10:00	<i>ON SITE</i>	EETA	11-17-23 940



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 195683

Client Arcadis Site Name _____ Cooler unpacked by: [Signature]
Cooler Received on 11-17-23 Opened on 11-17-23
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other [initials]

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

Eurofins Cooler # EC 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 # 21 (CF 70.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 3
 - 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
- 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# HC316719
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes NA Larger than this.
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: _____

Eurofins - Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 22	1.8	2.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 22	1.6	2.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 22	2.4	3.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None

See Temperature Excursion Form

DATA VERIFICATION REPORT



November 28, 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 - Cleveland

Laboratory submittal: 195683-1

Sample date: 2023-11-13

Report received by CADENA: 2023-11-27

Initial Data Verification completed by CADENA: 2023-11-28

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:

HSP - GCMS VOC container was received with headspace according to the laboratory submittal case narrative and sample receipt documents. Client sample GCMS VOC results noted should be considered estimated and qualified with J flags if detected and UJ flags if non-detect. GCMS VOC samples -005, -006 - J/UJ flags.

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 595687.

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.

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 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.

Qualified Results Summary

CADENA Project ID: E203728

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory Submittal: 195683-1

Sample Name:	MW-40_111323	MW-31_111323
Lab Sample ID:	2401956835	2401956836
Sample Date:	11/13/2023	11/13/2023

Analyte	Cas No.	Report		Units	Valid	Report		Units	Valid
		Result	Limit		Qualifier	Result	Limit		Qualifier

GC/MS VOC

OSW-8260D

1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	2.2	1.0	ug/l	J	ND	1.0	ug/l	UJ
Tetrachloroethene	127-18-4	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Trichloroethene	79-01-6	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Vinyl chloride	75-01-4	0.93	1.0	ug/l	J	ND	1.0	ug/l	UJ

Analytical Results Summary

CADENA Project ID: E203728

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory Submittal: 195683-1

Analyte	Cas No.	Sample Name: TRIP BLANK_92				MW-47_111323				MW-46_111323				MW-70_111323				MW-40_111323				MW-31_111323			
		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	13	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	8.0	1.0	ug/l	---	2.8	1.0	ug/l	---	140	13	ug/l	---	2.2	1.0	ug/l	J	ND	1.0	ug/l	UJ
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	1.6	1.0	ug/l	---	0.54	1.0	ug/l	J	ND	13	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	23	1.0	ug/l	---	9.0	1.0	ug/l	---	380	13	ug/l	---	0.93	1.0	ug/l	J	ND	1.0	ug/l	UJ
<u>OSW-8260DSIM</u>																									
1,4-Dioxane	123-91-1					1.2	2.0	ug/l	J	5.7	2.0	ug/l	---	4.1	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---