

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

Ford LTP - Off Site

## JOB NUMBER

240-200086-1

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## Job Notes

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## Authorization



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# Definitions/Glossary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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: Ford LTP - Off Site

Job ID: 240-200086-1

**Job ID: 240-200086-1**

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## Job Narrative 240-200086-1

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 2/28/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 2.8°C.

### GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-604678 was outside the method criteria for the following analyte(s): Trichloroethene and Vinyl chloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D\_SIM: The following sample(s) was unable to be prepared and/or analyzed due to machine error : MS/MSD.

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

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# Method Summary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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



# Sample Summary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
240-200086-1	TRIP BLANK_115	Water	02/21/24 00:00	02/28/24 08:00
240-200086-2	MW-182S_022124	Water	02/21/24 13:05	02/28/24 08:00

- 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 - Off Site

Job ID: 240-200086-1

**Client Sample ID: TRIP BLANK\_115**

**Lab Sample ID: 240-200086-1**

No Detections.

**Client Sample ID: MW-182S\_022124**

**Lab Sample ID: 240-200086-2**

No Detections.

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

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

**Client Sample ID: TRIP BLANK\_115**

**Lab Sample ID: 240-200086-1**

**Date Collected: 02/21/24 00:00**

**Matrix: Water**

**Date Received: 02/28/24 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			03/01/24 19:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 19:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 19:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/24 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		62 - 137		03/01/24 19:39	1
4-Bromofluorobenzene (Surr)	98		56 - 136		03/01/24 19:39	1
Toluene-d8 (Surr)	107		78 - 122		03/01/24 19:39	1
Dibromofluoromethane (Surr)	107		73 - 120		03/01/24 19:39	1

# Client Sample Results

Client: Arcadis U.S., Inc.  
 Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

**Client Sample ID: MW-182S\_022124**

**Lab Sample ID: 240-200086-2**

**Date Collected: 02/21/24 13:05**

**Matrix: Water**

**Date Received: 02/28/24 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			03/02/24 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		68 - 127		03/02/24 02:00	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			03/01/24 19:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 19:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 19:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:02	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/24 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 137		03/01/24 19:02	1
4-Bromofluorobenzene (Surr)	87		56 - 136		03/01/24 19:02	1
Toluene-d8 (Surr)	99		78 - 122		03/01/24 19:02	1
Dibromofluoromethane (Surr)	102		73 - 120		03/01/24 19:02	1

# Surrogate Summary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (62-137)	BFB (56-136)	TOL (78-122)	DBFM (73-120)
240-200086-1	TRIP BLANK_115	123	98	107	107
240-200086-2	MW-182S_022124	119	87	99	102
240-200104-C-2 MS	Matrix Spike	105	99	99	91
240-200104-C-2 MSD	Matrix Spike Duplicate	100	94	101	90
240-200125-B-1 MS	Matrix Spike	116	100	108	104
240-200125-B-1 MSD	Matrix Spike Duplicate	116	102	109	105
LCS 240-604678/4	Lab Control Sample	106	103	106	88
LCS 240-604751/5	Lab Control Sample	117	102	107	104
MB 240-604678/7	Method Blank	113	93	101	95
MB 240-604751/8	Method Blank	118	98	107	104

#### 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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA
		(68-127)
240-200086-2	MW-182S_022124	123
LCS 240-604761/4	Lab Control Sample	102
MB 240-604761/6	Method Blank	104

#### Surrogate Legend

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

# QC Sample Results

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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

**Lab Sample ID: MB 240-604678/7**  
**Matrix: Water**  
**Analysis Batch: 604678**

**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			03/01/24 11:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 11:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 11:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 11:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 11:56	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/24 11:56	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	113		62 - 137		03/01/24 11:56	1
4-Bromofluorobenzene (Surr)	93		56 - 136		03/01/24 11:56	1
Toluene-d8 (Surr)	101		78 - 122		03/01/24 11:56	1
Dibromofluoromethane (Surr)	95		73 - 120		03/01/24 11:56	1

**Lab Sample ID: LCS 240-604678/4**  
**Matrix: Water**  
**Analysis Batch: 604678**

**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	21.6		ug/L		86	63 - 134
cis-1,2-Dichloroethene	25.0	20.7		ug/L		83	77 - 123
Tetrachloroethene	25.0	23.6		ug/L		94	76 - 123
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	75 - 124
Trichloroethene	25.0	19.8		ug/L		79	70 - 122
Vinyl chloride	12.5	12.0		ug/L		96	60 - 144

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	106		62 - 137
4-Bromofluorobenzene (Surr)	103		56 - 136
Toluene-d8 (Surr)	106		78 - 122
Dibromofluoromethane (Surr)	88		73 - 120

**Lab Sample ID: 240-200104-C-2 MS**  
**Matrix: Water**  
**Analysis Batch: 604678**

**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	19.2		ug/L		77	56 - 135
cis-1,2-Dichloroethene	1.0	U F2 F1	25.0	19.9		ug/L		80	66 - 128
Tetrachloroethene	1.0	U	25.0	20.3		ug/L		81	62 - 131
trans-1,2-Dichloroethene	1.0	U F2	25.0	21.1		ug/L		85	56 - 136
Trichloroethene	1.0	U F2	25.0	18.7		ug/L		75	61 - 124
Vinyl chloride	1.0	U	12.5	9.74		ug/L		78	43 - 157

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		62 - 137
4-Bromofluorobenzene (Surr)	99		56 - 136
Toluene-d8 (Surr)	99		78 - 122

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# QC Sample Results

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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

**Lab Sample ID: 240-200104-C-2 MS**  
**Matrix: Water**  
**Analysis Batch: 604678**

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

Surrogate	%Recovery	MS MS Qualifier	Limits
Dibromofluoromethane (Surr)	91		73 - 120

**Lab Sample ID: 240-200104-C-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 604678**

**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	1.0	U	25.0	17.9		ug/L		71	56 - 135	8	26
cis-1,2-Dichloroethene	1.0	U F2 F1	25.0	15.9	F2 F1	ug/L		64	66 - 128	22	14
Tetrachloroethene	1.0	U	25.0	19.1		ug/L		76	62 - 131	6	20
trans-1,2-Dichloroethene	1.0	U F2	25.0	17.0	F2	ug/L		68	56 - 136	21	15
Trichloroethene	1.0	U F2	25.0	15.8	F2	ug/L		63	61 - 124	17	15
Vinyl chloride	1.0	U	12.5	10.1		ug/L		81	43 - 157	3	24

Surrogate	%Recovery	MSD MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	101		78 - 122
Dibromofluoromethane (Surr)	90		73 - 120

**Lab Sample ID: MB 240-604751/8**  
**Matrix: Water**  
**Analysis Batch: 604751**

**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			03/01/24 18:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 18:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 18:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 18:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 18:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/24 18:27	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		62 - 137		03/01/24 18:27	1
4-Bromofluorobenzene (Surr)	98		56 - 136		03/01/24 18:27	1
Toluene-d8 (Surr)	107		78 - 122		03/01/24 18:27	1
Dibromofluoromethane (Surr)	104		73 - 120		03/01/24 18:27	1

**Lab Sample ID: LCS 240-604751/5**  
**Matrix: Water**  
**Analysis Batch: 604751**

**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	25.0	26.6		ug/L		106	63 - 134
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	77 - 123
Tetrachloroethene	25.0	27.3		ug/L		109	76 - 123
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	75 - 124
Trichloroethene	25.0	25.6		ug/L		102	70 - 122

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# QC Sample Results

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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

**Lab Sample ID: LCS 240-604751/5**  
**Matrix: Water**  
**Analysis Batch: 604751**

**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	9.33		ug/L		75	60 - 144
<b>Surrogate</b>							
	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	117		62 - 137				
4-Bromofluorobenzene (Surr)	102		56 - 136				
Toluene-d8 (Surr)	107		78 - 122				
Dibromofluoromethane (Surr)	104		73 - 120				

**Lab Sample ID: 240-200125-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 604751**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	100	U	2500	2510		ug/L		100	56 - 135
cis-1,2-Dichloroethene	150		2500	2550		ug/L		96	66 - 128
Tetrachloroethene	100	U	2500	2430		ug/L		97	62 - 131
trans-1,2-Dichloroethene	100	U	2500	2410		ug/L		97	56 - 136
Trichloroethene	1800		2500	3990		ug/L		89	61 - 124
Vinyl chloride	100	U	1250	931		ug/L		74	43 - 157
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	116		62 - 137						
4-Bromofluorobenzene (Surr)	100		56 - 136						
Toluene-d8 (Surr)	108		78 - 122						
Dibromofluoromethane (Surr)	104		73 - 120						

**Lab Sample ID: 240-200125-B-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 604751**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	100	U	2500	2500		ug/L		100	56 - 135	0	26
cis-1,2-Dichloroethene	150		2500	2580		ug/L		97	66 - 128	1	14
Tetrachloroethene	100	U	2500	2480		ug/L		99	62 - 131	2	20
trans-1,2-Dichloroethene	100	U	2500	2420		ug/L		97	56 - 136	0	15
Trichloroethene	1800		2500	4010		ug/L		90	61 - 124	0	15
Vinyl chloride	100	U	1250	964		ug/L		77	43 - 157	4	24
<b>Surrogate</b>											
	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	116		62 - 137								
4-Bromofluorobenzene (Surr)	102		56 - 136								
Toluene-d8 (Surr)	109		78 - 122								
Dibromofluoromethane (Surr)	105		73 - 120								

# QC Sample Results

Client: Arcadis U.S., Inc.  
 Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

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

**Lab Sample ID: MB 240-604761/6**  
**Matrix: Water**  
**Analysis Batch: 604761**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/01/24 23:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		68 - 127					03/01/24 23:04	1

**Lab Sample ID: LCS 240-604761/4**  
**Matrix: Water**  
**Analysis Batch: 604761**

**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	9.73		ug/L		97	75 - 121
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	102		68 - 127				

# QC Association Summary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

## GC/MS VOA

### Analysis Batch: 604678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-200086-2	MW-182S_022124	Total/NA	Water	8260D	
MB 240-604678/7	Method Blank	Total/NA	Water	8260D	
LCS 240-604678/4	Lab Control Sample	Total/NA	Water	8260D	
240-200104-C-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-200104-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

### Analysis Batch: 604751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-200086-1	TRIP BLANK_115	Total/NA	Water	8260D	
MB 240-604751/8	Method Blank	Total/NA	Water	8260D	
LCS 240-604751/5	Lab Control Sample	Total/NA	Water	8260D	
240-200125-B-1 MS	Matrix Spike	Total/NA	Water	8260D	
240-200125-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

### Analysis Batch: 604761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-200086-2	MW-182S_022124	Total/NA	Water	8260D SIM	
MB 240-604761/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-604761/4	Lab Control Sample	Total/NA	Water	8260D SIM	



# Lab Chronicle

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

**Client Sample ID: TRIP BLANK\_115**

**Lab Sample ID: 240-200086-1**

**Date Collected: 02/21/24 00:00**

**Matrix: Water**

**Date Received: 02/28/24 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	604751	CDG	EET CLE	03/01/24 19:39

**Client Sample ID: MW-182S\_022124**

**Lab Sample ID: 240-200086-2**

**Date Collected: 02/21/24 13:05**

**Matrix: Water**

**Date Received: 02/28/24 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	604678	LEE	EET CLE	03/01/24 19:02
Total/NA	Analysis	8260D SIM		1	604761	MDH	EET CLE	03/02/24 02:00

**Laboratory References:**

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



# Accreditation/Certification Summary

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

## 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 *
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	03-03-24
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-01-24
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

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



Eurofins - Cleveland Sample Receipt Form/Narrative

Barber for Facility

Client

Hydrodis

Site Name

2-29-24

Cooler unpacked by

M. Woods

Cooler Received on

2-29-24

Opened on

2-29-24

Client Drop Off

Other

Receipt After-hours Drop-off Date/Time

Storage Location

Eurofins Cooler #

2

Eaam-Rbx

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

IR GUN # 22

(CF D)

(°C) Observed Cooler Temp.

See Multiple Cooler Form

°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 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/com (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 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

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 \_\_\_\_\_

Tests that are not checked for pH by Receiving  
VOAs  
Oil and Grease  
TOC



# DATA VERIFICATION REPORT



March 06, 2024

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

CADENA project ID: E203631  
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater  
Project number: 30167538.402.04  
Event Specific Scope of Work References: Sample COC  
Laboratory: Eurofins Environment Testing LLC - Cleveland  
Laboratory submittal: 200086-1  
Sample date: 2024-02-21  
Report received by CADENA: 2024-03-06  
Initial Data Verification completed by CADENA: 2024-03-06  
Number of Samples:2  
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.**

The following minor QC exceptions or missing information were noted:

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 604678. NOTE: QC batch 604761 for GCMS-SIM VOC testing did not include an MS/MSD due to equipment error as noted in laboratory submittal case narrative.

GCMS VOC CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

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.

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>.

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:** E203631

**Laboratory:** Eurofins Environment Testing LLC - Cleveland

**Laboratory Submittal:** 200086-1

<b>Sample Name:</b>	TRIP BLANK_115	MW-182S_022124
<b>Lab Sample ID:</b>	2402000861	2402000862
<b>Sample Date:</b>	2/21/2024	2/21/2024

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



# Ford Motor Company – Livonia Transmission Project

## Data Review

### Livonia, Michigan

Volatile Organic Compounds (VOC) Analysis

SDG # 240-200086-1

CADENA Verification Report: 2024-03-06

Analyses Performed By:  
Eurofins Cleveland  
Barberton, Ohio

Report # 53261R  
Review Level: Tier III  
Project: 30167538.402.02

## DATA REVIEW

### SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-200086-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) include a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis	
					VOC	VOC SIM
TRIP BLANK_115	240-200086-1	Water	02/21/2024		X	
MW-182S_022124	240-200086-2	Water	02/21/2024		X	X

## DATA REVIEW

### ANALYTICAL DATA PACKAGE DOCUMENTATION

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

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

## DATA REVIEW

### ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260D and 8260D SIM. Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999), as appropriate.

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

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

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

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

## DATA REVIEW

### VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

#### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260D/8260D-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

#### 2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable, and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

#### 3. Calibration

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

##### 3.1 Initial Calibration

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

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

##### 3.2 Continuing Calibration

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

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

Sample ID	Initial / Continuing	Compounds	Criteria
MW-182S_022124	Continuing Calibration Verification %D	Vinyl chloride	+23.7%
		Trichloroethene	-21.1%

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

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01 <sup>1</sup>	Non-detect	R
		Detect	J
RRF >0.05 or RRF >0.01 <sup>1</sup>	Non-detect	No Action	

## DATA REVIEW

Initial/Continuing	Criteria	Sample Result	Qualification
		Detect	
Initial Calibration	%RSD > 20% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD > 90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	UJ
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D > 90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

Note:

<sup>1</sup>RRF of 0.01 only applies to compounds which are typically poor responding compounds

### 4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

### 5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected for samples from this SDG.

### 6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

No compounds were detected in the samples within this SDG.

### 7. System Performance and Overall Assessment

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

## DATA REVIEW

### DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260D/8260D-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)</b>					
<b>Tier II Validation</b>					
Holding times/Preservation		X		X	
<b>Tier III Validation</b>					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Field Duplicate RPD	X				X
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

## DATA REVIEW

VALIDATION PERFORMED BY: Bindu Sree M B

SIGNATURE: 

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DATE: March 18, 2024

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PEER REVIEW: Andrew Korycinski

DATE: March 26, 2024

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**CHAIN OF CUSTODY  
CORRECTED SAMPLE ANALYSIS DATA  
SHEETS**





# Client Sample Results

Client: Arcadis U.S., Inc.  
Project/Site: Ford LTP - Off Site

Job ID: 240-200086-1

**Client Sample ID: TRIP BLANK\_115**

**Lab Sample ID: 240-200086-1**

Date Collected: 02/21/24 00:00

Matrix: Water

Date Received: 02/28/24 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			03/01/24 19:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 19:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 19:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/24 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		62 - 137		03/01/24 19:39	1
4-Bromofluorobenzene (Surr)	98		56 - 136		03/01/24 19:39	1
Toluene-d8 (Surr)	107		78 - 122		03/01/24 19:39	1
Dibromofluoromethane (Surr)	107		73 - 120		03/01/24 19:39	1

**Client Sample ID: MW-182S\_022124**

**Lab Sample ID: 240-200086-2**

Date Collected: 02/21/24 13:05

Matrix: Water

Date Received: 02/28/24 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			03/02/24 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		68 - 127		03/02/24 02:00	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			03/01/24 19:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/24 19:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/24 19:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/24 19:02	1
Trichloroethene	1.0	U UU	1.0	0.44	ug/L			03/01/24 19:02	1
Vinyl chloride	1.0	U UU	1.0	0.45	ug/L			03/01/24 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 137		03/01/24 19:02	1
4-Bromofluorobenzene (Surr)	87		56 - 136		03/01/24 19:02	1
Toluene-d8 (Surr)	99		78 - 122		03/01/24 19:02	1
Dibromofluoromethane (Surr)	102		73 - 120		03/01/24 19:02	1