

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Megan Meckley
Arcadis US Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Generated 3/12/2025 7:13:24 AM

JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-219633-1

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

Job ID: 240-219633-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Ford LTP

Job ID: 240-219633-1

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Eurofins Cleveland

Job Narrative 240-219633-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 2/28/2025 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 1.1°C and 1.6°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-647052 was outside the method criteria for the following analyte(s): 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.

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 US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

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 US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219633-1	TRIP BLANK_116	Water	02/26/25 00:00	02/28/25 08:00
240-219633-2	MW-211S_022625	Water	02/26/25 08:40	02/28/25 08:00

1

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Detection Summary

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

Client Sample ID: TRIP BLANK_116

Lab Sample ID: 240-219633-1

No Detections.

Client Sample ID: MW-211S_022625

Lab Sample ID: 240-219633-2

No Detections.

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

Client Sample ID: TRIP BLANK_116

Lab Sample ID: 240-219633-1

Date Collected: 02/26/25 00:00

Matrix: Water

Date Received: 02/28/25 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			03/06/25 18:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/06/25 18:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 18:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/06/25 18:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 18:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/06/25 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		62 - 137		03/06/25 18:13	1
4-Bromofluorobenzene (Surr)	98		56 - 136		03/06/25 18:13	1
Toluene-d8 (Surr)	102		78 - 122		03/06/25 18:13	1
Dibromofluoromethane (Surr)	97		73 - 120		03/06/25 18:13	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

Client Sample ID: MW-211S_022625

Lab Sample ID: 240-219633-2

Date Collected: 02/26/25 08:40

Matrix: Water

Date Received: 02/28/25 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			03/10/25 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		68 - 127					03/10/25 15:46	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			03/06/25 18:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/06/25 18:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 18:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/06/25 18:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 18:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/06/25 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		62 - 137					03/06/25 18:36	1
4-Bromofluorobenzene (Surr)	98		56 - 136					03/06/25 18:36	1
Toluene-d8 (Surr)	106		78 - 122					03/06/25 18:36	1
Dibromofluoromethane (Surr)	101		73 - 120					03/06/25 18:36	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

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	DCA (62-137)	BFB (56-136)	TOL (78-122)	DBFM (73-120)
240-219544-B-4 MS	Matrix Spike	103	97	105	96
240-219544-B-4 MSD	Matrix Spike Duplicate	102	102	107	95
240-219633-1	TRIP BLANK_116	111	98	102	97
240-219633-2	MW-211S_022625	114	98	106	101
LCS 240-647052/4	Lab Control Sample	99	98	101	95
MB 240-647052/7	Method Blank	110	96	102	97
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)			
240-219633-2	MW-211S_022625	109			
500-264504-A-12 MSD	Matrix Spike Duplicate	102			
500-264504-C-12 MS	Matrix Spike	106			
LCS 240-647508/4	Lab Control Sample	111			
MB 240-647508/6	Method Blank	107			
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					

QC Sample Results

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

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

Lab Sample ID: MB 240-647052/7

Matrix: Water

Analysis Batch: 647052

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			03/06/25 10:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/06/25 10:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 10:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/06/25 10:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 10:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/06/25 10:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		62 - 137		03/06/25 10:59	1
4-Bromofluorobenzene (Surr)	96		56 - 136		03/06/25 10:59	1
Toluene-d8 (Surr)	102		78 - 122		03/06/25 10:59	1
Dibromofluoromethane (Surr)	97		73 - 120		03/06/25 10:59	1

Lab Sample ID: LCS 240-647052/4

Matrix: Water

Analysis Batch: 647052

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	24.5		ug/L		98	63 - 134
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	77 - 123
Tetrachloroethene	25.0	23.8		ug/L		95	76 - 123
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	75 - 124
Trichloroethene	25.0	22.6		ug/L		90	70 - 122
Vinyl chloride	12.5	9.43		ug/L		75	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	101		78 - 122
Dibromofluoromethane (Surr)	95		73 - 120

Lab Sample ID: 240-219544-B-4 MS

Matrix: Water

Analysis Batch: 647052

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	105		78 - 122
Dibromofluoromethane (Surr)	96		73 - 120

Lab Sample ID: 240-219544-B-4 MSD

Matrix: Water

Analysis Batch: 647052

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		62 - 137

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QC Sample Results

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

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

Lab Sample ID: 240-219544-B-4 MSD

Matrix: Water

Analysis Batch: 647052

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		56 - 136
Toluene-d8 (Surr)	107		78 - 122
Dibromofluoromethane (Surr)	95		73 - 120

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

Lab Sample ID: MB 240-647508/6

Matrix: Water

Analysis Batch: 647508

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB								
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/10/25 13:25	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
1,2-Dichloroethane-d4 (Surr)	107		68 - 127					03/10/25 13:25	1	

Lab Sample ID: LCS 240-647508/4

Matrix: Water

Analysis Batch: 647508

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte		Spike	LCS	LCS					%Rec	
	Added	Result	Qualifier	Unit	D	%Rec	Limits			
1,4-Dioxane	10.0	10.2		ug/L		102	75 - 121			
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	111		68 - 127							

Lab Sample ID: 500-264504-A-12 MSD

Matrix: Water

Analysis Batch: 647508

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD				%Rec	RPD	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	5500		500	5750	4	ug/L		46	20 - 180	3	20
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	102		68 - 127								

Lab Sample ID: 500-264504-C-12 MS

Matrix: Water

Analysis Batch: 647508

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS				%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,4-Dioxane	5500		500	5900	4	ug/L		76	20 - 180	
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	106		68 - 127							

Eurofins Cleveland

QC Association Summary

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

GC/MS VOA

Analysis Batch: 647052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219633-1	TRIP BLANK_116	Total/NA	Water	8260D	
240-219633-2	MW-211S_022625	Total/NA	Water	8260D	
MB 240-647052/7	Method Blank	Total/NA	Water	8260D	
LCS 240-647052/4	Lab Control Sample	Total/NA	Water	8260D	
240-219544-B-4 MS	Matrix Spike	Total/NA	Water	8260D	
240-219544-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 647508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219633-2	MW-211S_022625	Total/NA	Water	8260D SIM	
MB 240-647508/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-647508/4	Lab Control Sample	Total/NA	Water	8260D SIM	
500-264504-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	
500-264504-C-12 MS	Matrix Spike	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: Ford LTP

Job ID: 240-219633-1

Client Sample ID: TRIP BLANK_116
Date Collected: 02/26/25 00:00
Date Received: 02/28/25 08:00

Lab Sample ID: 240-219633-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	647052	LEE	EET CLE	03/06/25 18:13

Client Sample ID: MW-211S_022625
Date Collected: 02/26/25 08:40
Date Received: 02/28/25 08:00

Lab Sample ID: 240-219633-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	647052	LEE	EET CLE	03/06/25 18:36
Total/NA	Analysis	8260D SIM		1	647508	R5XG	EET CLE	03/10/25 15:46

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

Job ID: 240-219633-1

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
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

TestAmerica Laboratory location: Farmington Hills — 38855 Hills Tech Drive, Suite 600, Farmington Hills 48331

[illegible]

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: JMOROSKO

Cooler Received on 2/28/25 Opened on 2/28/25

FedEx, 1st Grd Exp UPS FAS W@Ypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # 8C 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 # 13 (CF TD, D °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No 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 preservative (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# HC448976

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 # covered 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 _____

2/28/2025

Login Container Summary Report

240-219633

3/12/2025

Temperature readings

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container Preservation</u>		
			<u>pH</u>	<u>Temp</u>	<u>Added Lot Number</u>
TRIP BLANK_116	240-219633-A-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-B-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-D-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-E-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____
MW-211S_022625	240-219633-F-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____

DATA VERIFICATION REPORT



March 12, 2025

Megan Meckley
Arcadis
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: 30251157.401.04 (vapor 301.04) 30206169.0401.04

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 219633-1

Sample date: 2025-02-26

Report received by CADENA: 2025-03-12

Initial Data Verification completed by CADENA: 2025-03-12

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:

GCMS VOC QC batch MS/MSD recovery outliers were not determined using a client sample so qualification was not required based on these sample-specific QC outliers.

GCMS VOC QC batch CCV 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>.

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 - Cleveland

Laboratory Submittal: 219633-1

Sample Name: TRIP BLANK_116

MW-211S_022625

Lab Sample ID: 2402196331

2402196332

Sample Date: 2/26/2025

2/26/2025

Analyte	Cas No.	Report		Valid		Report		Valid	
		Result	Limit			Result	Limit		
				Units	Qualifier			Units	Qualifier
GC/MS VOC									
<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	---