

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-231475-1

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Job Notes

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Authorization



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Definitions/Glossary

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

Job ID: 240-231475-1

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: Ford LTP

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Job Narrative 240-231475-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 8/22/2025 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 1.7°C and 2.2°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-669451 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: 240-231475-1

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: 240-231475-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-231475-1	TRIP BLANK_3	Water	08/20/25 00:00	08/22/25 08:00	Michigan
240-231475-2	MW-54_082025	Water	08/20/25 10:10	08/22/25 08:00	Michigan
240-231475-3	MW-53_082025	Water	08/20/25 11:10	08/22/25 08:00	Michigan
240-231475-4	MW-54S_082025	Water	08/20/25 11:30	08/22/25 08:00	Michigan
240-231475-5	MW-57_082025	Water	08/20/25 12:50	08/22/25 08:00	Michigan
240-231475-6	MW-70_082025	Water	08/20/25 13:50	08/22/25 08:00	Michigan

Detection Summary

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

Job ID: 240-231475-1

Client Sample ID: TRIP BLANK_3

Lab Sample ID: 240-231475-1

No Detections.

Client Sample ID: MW-54_082025

Lab Sample ID: 240-231475-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-53_082025

Lab Sample ID: 240-231475-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.64	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-54S_082025

Lab Sample ID: 240-231475-4

No Detections.

Client Sample ID: MW-57_082025

Lab Sample ID: 240-231475-5

No Detections.

Client Sample ID: MW-70_082025

Lab Sample ID: 240-231475-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	130		13	5.8	ug/L	12.5		8260D	Total/NA
Vinyl chloride	710		13	5.6	ug/L	12.5		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: TRIP BLANK_3

Lab Sample ID: 240-231475-1

Date Collected: 08/20/25 00:00

Matrix: Water

Date Received: 08/22/25 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			08/27/25 16:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 16:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 16:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 16:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 16:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/27/25 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		62 - 137		08/27/25 16:43	1
4-Bromofluorobenzene (Surr)	85		56 - 136		08/27/25 16:43	1
Toluene-d8 (Surr)	99		78 - 122		08/27/25 16:43	1
Dibromofluoromethane (Surr)	117		73 - 120		08/27/25 16:43	1

Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: MW-54_082025

Lab Sample ID: 240-231475-2

Date Collected: 08/20/25 10:10

Matrix: Water

Date Received: 08/22/25 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	1.5	J	2.0	0.86	ug/L			08/28/25 12:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		68 - 127					08/28/25 12:07	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			08/27/25 17:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 17:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 17:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 17:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 17:06	1
Vinyl chloride	1.4		1.0	0.45	ug/L			08/29/25 12:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		62 - 137					08/27/25 17:06	1
1,2-Dichloroethane-d4 (Surr)	90		62 - 137					08/29/25 12:30	1
4-Bromofluorobenzene (Surr)	81		56 - 136					08/27/25 17:06	1
4-Bromofluorobenzene (Surr)	90		56 - 136					08/29/25 12:30	1
Toluene-d8 (Surr)	95		78 - 122					08/27/25 17:06	1
Toluene-d8 (Surr)	93		78 - 122					08/29/25 12:30	1
Dibromofluoromethane (Surr)	116		73 - 120					08/27/25 17:06	1
Dibromofluoromethane (Surr)	86		73 - 120					08/29/25 12:30	1

Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: MW-53_082025

Lab Sample ID: 240-231475-3

Date Collected: 08/20/25 11:10

Matrix: Water

Date Received: 08/22/25 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			08/26/25 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		68 - 127					08/26/25 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/27/25 18:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 18:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 18:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 18:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 18:15	1
Vinyl chloride	0.64	J	1.0	0.45	ug/L			08/27/25 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 137					08/27/25 18:15	1
4-Bromofluorobenzene (Surr)	84		56 - 136					08/27/25 18:15	1
Toluene-d8 (Surr)	98		78 - 122					08/27/25 18:15	1
Dibromofluoromethane (Surr)	112		73 - 120					08/27/25 18:15	1

Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: MW-54S_082025

Lab Sample ID: 240-231475-4

Date Collected: 08/20/25 11:30

Matrix: Water

Date Received: 08/22/25 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			08/26/25 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		68 - 127					08/26/25 17:49	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			08/27/25 18:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 18:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 18:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 18:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 18:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/27/25 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		62 - 137					08/27/25 18:38	1
4-Bromofluorobenzene (Surr)	84		56 - 136					08/27/25 18:38	1
Toluene-d8 (Surr)	96		78 - 122					08/27/25 18:38	1
Dibromofluoromethane (Surr)	113		73 - 120					08/27/25 18:38	1

Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: MW-57_082025

Lab Sample ID: 240-231475-5

Date Collected: 08/20/25 12:50

Matrix: Water

Date Received: 08/22/25 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			08/28/25 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		68 - 127					08/28/25 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/27/25 19:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 19:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 19:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 19:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 19:01	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/27/25 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		62 - 137					08/27/25 19:01	1
4-Bromofluorobenzene (Surr)	87		56 - 136					08/27/25 19:01	1
Toluene-d8 (Surr)	96		78 - 122					08/27/25 19:01	1
Dibromofluoromethane (Surr)	114		73 - 120					08/27/25 19:01	1

Client Sample Results

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

Job ID: 240-231475-1

Client Sample ID: MW-70_082025

Lab Sample ID: 240-231475-6

Date Collected: 08/20/25 13:50

Matrix: Water

Date Received: 08/22/25 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	6.8		2.0	0.86	ug/L			08/28/25 13:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		68 - 127					08/28/25 13:19	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			08/29/25 14:47	12.5
cis-1,2-Dichloroethene	130		13	5.8	ug/L			08/29/25 14:47	12.5
Tetrachloroethene	13	U	13	5.5	ug/L			08/29/25 14:47	12.5
trans-1,2-Dichloroethene	13	U	13	6.4	ug/L			08/29/25 14:47	12.5
Trichloroethene	13	U	13	5.5	ug/L			08/29/25 14:47	12.5
Vinyl chloride	710		13	5.6	ug/L			08/29/25 14:47	12.5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		62 - 137					08/29/25 14:47	12.5
4-Bromofluorobenzene (Surr)	83		56 - 136					08/29/25 14:47	12.5
Toluene-d8 (Surr)	96		78 - 122					08/29/25 14:47	12.5
Dibromofluoromethane (Surr)	120		73 - 120					08/29/25 14:47	12.5

Surrogate Summary

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

Job ID: 240-231475-1

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)
240-231475-1	TRIP BLANK_3	125	85	99	117
240-231475-2	MW-54_082025	123	81	95	116
240-231475-2	MW-54_082025	90	90	93	86
240-231475-2 MS	MW-54-MS_082025	104	95	98	98
240-231475-2 MS	MW-54-MS_082025	84	86	85	84
240-231475-2 MSD	MW-54-MSD_082025	106	98	99	100
240-231475-2 MSD	MW-54-MSD_082025	91	93	90	95
240-231475-3	MW-53_082025	119	84	98	112
240-231475-4	MW-54S_082025	124	84	96	113
240-231475-5	MW-57_082025	120	87	96	114
240-231475-6	MW-70_082025	129	83	96	120
240-231558-C-4 MS	Matrix Spike	108	97	99	102
240-231558-C-4 MSD	Matrix Spike Duplicate	105	98	99	101
LCS 240-669451/4	Lab Control Sample	105	99	104	97
LCS 240-669775/4	Lab Control Sample	106	97	103	98
LCS 240-669779/4	Lab Control Sample	88	94	98	95
MB 240-669451/7	Method Blank	122	90	98	113
MB 240-669775/7	Method Blank	123	85	99	111
MB 240-669779/7	Method Blank	90	91	90	85
MB 240-669779/8	Method Blank	87	89	96	85

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 (68-127)			
240-231293-E-4 MS	Matrix Spike	79			
240-231293-E-4 MSD	Matrix Spike Duplicate	81			
240-231475-2	MW-54_082025	87			
240-231475-2 MS	MW-54-MS_082025	81			
240-231475-2 MSD	MW-54-MSD_082025	81			
240-231475-3	MW-53_082025	79			
240-231475-4	MW-54S_082025	80			
240-231475-5	MW-57_082025	87			
240-231475-6	MW-70_082025	87			
LCS 240-669266/5	Lab Control Sample	81			
LCS 240-669616/6	Lab Control Sample	90			
MB 240-669266/7	Method Blank	82			
MB 240-669616/8	Method Blank	85			

Surrogate Legend

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

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QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: MB 240-669451/7

Matrix: Water

Analysis Batch: 669451

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			08/27/25 11:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/27/25 11:21	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 11:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/27/25 11:21	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/27/25 11:21	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/27/25 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		62 - 137		08/27/25 11:21	1
4-Bromofluorobenzene (Surr)	90		56 - 136		08/27/25 11:21	1
Toluene-d8 (Surr)	98		78 - 122		08/27/25 11:21	1
Dibromofluoromethane (Surr)	113		73 - 120		08/27/25 11:21	1

Lab Sample ID: LCS 240-669451/4

Matrix: Water

Analysis Batch: 669451

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	27.2		ug/L		109	63 - 134
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	77 - 123
Tetrachloroethene	25.0	24.9		ug/L		100	76 - 123
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	75 - 124
Trichloroethene	25.0	24.0		ug/L		96	70 - 122
Vinyl chloride	12.5	13.3		ug/L		106	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		62 - 137
4-Bromofluorobenzene (Surr)	99		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	97		73 - 120

Lab Sample ID: 240-231475-2 MS

Matrix: Water

Analysis Batch: 669451

Client Sample ID: MW-54-MS_082025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	1.0	U	25.0	24.5		ug/L		98	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	23.6		ug/L		94	66 - 128
Tetrachloroethene	1.0	U	25.0	22.1		ug/L		88	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	23.5		ug/L		94	56 - 136
Trichloroethene	1.0	U	25.0	22.5		ug/L		90	61 - 124

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		62 - 137
4-Bromofluorobenzene (Surr)	95		56 - 136
Toluene-d8 (Surr)	98		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: 240-231475-2 MSD

Matrix: Water

Analysis Batch: 669451

Client Sample ID: MW-54-MSD_082025

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	25.8		ug/L		103	56 - 135	5	26
cis-1,2-Dichloroethene	1.0	U	25.0	26.2		ug/L		105	66 - 128	10	14
Tetrachloroethene	1.0	U	25.0	23.8		ug/L		95	62 - 131	7	20
trans-1,2-Dichloroethene	1.0	U	25.0	24.7		ug/L		99	56 - 136	5	15
Trichloroethene	1.0	U	25.0	24.0		ug/L		96	61 - 124	7	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	99		78 - 122
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: MB 240-669775/7

Matrix: Water

Analysis Batch: 669775

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			08/29/25 10:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/29/25 10:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 10:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/29/25 10:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 10:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/29/25 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		62 - 137		08/29/25 10:58	1
4-Bromofluorobenzene (Surr)	85		56 - 136		08/29/25 10:58	1
Toluene-d8 (Surr)	99		78 - 122		08/29/25 10:58	1
Dibromofluoromethane (Surr)	111		73 - 120		08/29/25 10:58	1

Lab Sample ID: LCS 240-669775/4

Matrix: Water

Analysis Batch: 669775

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	24.7		ug/L		99	63 - 134
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	77 - 123
Tetrachloroethene	25.0	23.7		ug/L		95	76 - 123
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	75 - 124
Trichloroethene	25.0	22.5		ug/L		90	70 - 122
Vinyl chloride	12.5	11.9		ug/L		95	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	103		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

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QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: 240-231558-C-4 MS

Matrix: Water

Analysis Batch: 669775

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	1.0	U	25.0	21.9		ug/L		88	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	22.9		ug/L		92	66 - 128
Tetrachloroethene	1.0	U	25.0	19.0		ug/L		76	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	21.2		ug/L		85	56 - 136
Trichloroethene	1.0	U	25.0	21.0		ug/L		84	61 - 124
Vinyl chloride	30	F1	12.5	32.5	F1	ug/L		24	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	99		78 - 122
Dibromofluoromethane (Surr)	102		73 - 120

Lab Sample ID: 240-231558-C-4 MSD

Matrix: Water

Analysis Batch: 669775

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	23.2		ug/L		93	56 - 135	5	26
cis-1,2-Dichloroethene	1.0	U	25.0	23.1		ug/L		93	66 - 128	1	14
Tetrachloroethene	1.0	U	25.0	21.5		ug/L		86	62 - 131	12	20
trans-1,2-Dichloroethene	1.0	U	25.0	21.8		ug/L		87	56 - 136	3	15
Trichloroethene	1.0	U	25.0	21.4		ug/L		85	61 - 124	2	15
Vinyl chloride	30	F1	12.5	33.3	F1	ug/L		30	43 - 157	2	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	99		78 - 122
Dibromofluoromethane (Surr)	101		73 - 120

Lab Sample ID: MB 240-669779/7

Matrix: Water

Analysis Batch: 669779

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			08/29/25 11:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/29/25 11:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 11:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/29/25 11:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 11:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/29/25 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		62 - 137		08/29/25 11:15	1
4-Bromofluorobenzene (Surr)	91		56 - 136		08/29/25 11:15	1
Toluene-d8 (Surr)	90		78 - 122		08/29/25 11:15	1

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: MB 240-669779/7

Matrix: Water

Analysis Batch: 669779

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Dibromofluoromethane (Surr)	85		73 - 120		08/29/25 11:15	1			

Lab Sample ID: MB 240-669779/8

Matrix: Water

Analysis Batch: 669779

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/29/25 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/29/25 11:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/29/25 11:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/29/25 11:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/29/25 11:34	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,2-Dichloroethane-d4 (Surr)	87		62 - 137		08/29/25 11:34	1			
4-Bromofluorobenzene (Surr)	89		56 - 136		08/29/25 11:34	1			
Toluene-d8 (Surr)	96		78 - 122		08/29/25 11:34	1			
Dibromofluoromethane (Surr)	85		73 - 120		08/29/25 11:34	1			

Lab Sample ID: LCS 240-669779/4

Matrix: Water

Analysis Batch: 669779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS						%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
1,1-Dichloroethene	25.0	25.6		ug/L		103	63 - 134		
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	77 - 123		
Tetrachloroethene	25.0	24.4		ug/L		98	76 - 123		
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	75 - 124		
Trichloroethene	25.0	25.0		ug/L		100	70 - 122		
Vinyl chloride	12.5	13.4		ug/L		107	60 - 144		

	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	88		62 - 137						
4-Bromofluorobenzene (Surr)	94		56 - 136						
Toluene-d8 (Surr)	98		78 - 122						
Dibromofluoromethane (Surr)	95		73 - 120						

Lab Sample ID: 240-231475-2 MS

Matrix: Water

Analysis Batch: 669779

Client Sample ID: MW-54-MS_082025

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Vinyl chloride	1.4		12.5	13.0		ug/L		92	43 - 157

	MS	MS							
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	84		62 - 137						

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QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: 240-231475-2 MS

Matrix: Water

Analysis Batch: 669779

Client Sample ID: MW-54-MS_082025

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		56 - 136
Toluene-d8 (Surr)	85		78 - 122
Dibromofluoromethane (Surr)	84		73 - 120

Lab Sample ID: 240-231475-2 MSD

Matrix: Water

Analysis Batch: 669779

Client Sample ID: MW-54-MSD_082025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	1.4		12.5	15.1		ug/L		109	43 - 157	15	24
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	91		62 - 137								
4-Bromofluorobenzene (Surr)	93		56 - 136								
Toluene-d8 (Surr)	90		78 - 122								
Dibromofluoromethane (Surr)	95		73 - 120								

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

Lab Sample ID: MB 240-669266/7

Matrix: Water

Analysis Batch: 669266

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			08/26/25 09:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		68 - 127					08/26/25 09:50	1

Lab Sample ID: LCS 240-669266/5

Matrix: Water

Analysis Batch: 669266

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	7.71		ug/L		77	75 - 121		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	81		68 - 127						

Lab Sample ID: 240-231293-E-4 MS

Matrix: Water

Analysis Batch: 669266

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	7.71		ug/L		77	20 - 180		

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QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: 240-231293-E-4 MS

Matrix: Water

Analysis Batch: 669266

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	79		68 - 127

Lab Sample ID: 240-231293-E-4 MSD

Matrix: Water

Analysis Batch: 669266

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	2.0	U	10.0	7.84		ug/L		78	20 - 180	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	81		68 - 127								

Lab Sample ID: MB 240-669616/8

Matrix: Water

Analysis Batch: 669616

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			08/28/25 11:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		68 - 127					08/28/25 11:43	1

Lab Sample ID: LCS 240-669616/6

Matrix: Water

Analysis Batch: 669616

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	8.27		ug/L		83	75 - 121
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	90		68 - 127				

Lab Sample ID: 240-231475-2 MS

Matrix: Water

Analysis Batch: 669616

Client Sample ID: MW-54-MS_082025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.5	J	10.0	9.50		ug/L		80	20 - 180
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	81		68 - 127						

QC Sample Results

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

Job ID: 240-231475-1

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

Lab Sample ID: 240-231475-2 MSD				Client Sample ID: MW-54-MSD_082025								
Matrix: Water				Prep Type: Total/NA								
Analysis Batch: 669616												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
1,4-Dioxane	1.5	J	10.0	10.0		ug/L		85	20 - 180	5	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1,2-Dichloroethane-d4 (Surr)	81		68 - 127									

QC Association Summary

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

Job ID: 240-231475-1

GC/MS VOA

Analysis Batch: 669266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231475-3	MW-53_082025	Total/NA	Water	8260D SIM	
240-231475-4	MW-54S_082025	Total/NA	Water	8260D SIM	
MB 240-669266/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-669266/5	Lab Control Sample	Total/NA	Water	8260D SIM	
240-231293-E-4 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-231293-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 669451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231475-1	TRIP BLANK_3	Total/NA	Water	8260D	
240-231475-2	MW-54_082025	Total/NA	Water	8260D	
240-231475-3	MW-53_082025	Total/NA	Water	8260D	
240-231475-4	MW-54S_082025	Total/NA	Water	8260D	
240-231475-5	MW-57_082025	Total/NA	Water	8260D	
MB 240-669451/7	Method Blank	Total/NA	Water	8260D	
LCS 240-669451/4	Lab Control Sample	Total/NA	Water	8260D	
240-231475-2 MS	MW-54-MS_082025	Total/NA	Water	8260D	
240-231475-2 MSD	MW-54-MSD_082025	Total/NA	Water	8260D	

Analysis Batch: 669616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231475-2	MW-54_082025	Total/NA	Water	8260D SIM	
240-231475-5	MW-57_082025	Total/NA	Water	8260D SIM	
240-231475-6	MW-70_082025	Total/NA	Water	8260D SIM	
MB 240-669616/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-669616/6	Lab Control Sample	Total/NA	Water	8260D SIM	
240-231475-2 MS	MW-54-MS_082025	Total/NA	Water	8260D SIM	
240-231475-2 MSD	MW-54-MSD_082025	Total/NA	Water	8260D SIM	

Analysis Batch: 669775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231475-6	MW-70_082025	Total/NA	Water	8260D	
MB 240-669775/7	Method Blank	Total/NA	Water	8260D	
LCS 240-669775/4	Lab Control Sample	Total/NA	Water	8260D	
240-231558-C-4 MS	Matrix Spike	Total/NA	Water	8260D	
240-231558-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 669779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231475-2	MW-54_082025	Total/NA	Water	8260D	
MB 240-669779/7	Method Blank	Total/NA	Water	8260D	
MB 240-669779/8	Method Blank	Total/NA	Water	8260D	
LCS 240-669779/4	Lab Control Sample	Total/NA	Water	8260D	
240-231475-2 MS	MW-54-MS_082025	Total/NA	Water	8260D	
240-231475-2 MSD	MW-54-MSD_082025	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 240-231475-1

Client Sample ID: TRIP BLANK_3

Lab Sample ID: 240-231475-1

Date Collected: 08/20/25 00:00

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	669451	LEE	EET CLE	08/27/25 16:43

Client Sample ID: MW-54_082025

Lab Sample ID: 240-231475-2

Date Collected: 08/20/25 10:10

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	669451	LEE	EET CLE	08/27/25 17:06
Total/NA	Analysis	8260D		1	669779	LEE	EET CLE	08/29/25 12:30
Total/NA	Analysis	8260D SIM		1	669616	R5XG	EET CLE	08/28/25 12:07

Client Sample ID: MW-53_082025

Lab Sample ID: 240-231475-3

Date Collected: 08/20/25 11:10

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	669451	LEE	EET CLE	08/27/25 18:15
Total/NA	Analysis	8260D SIM		1	669266	R5XG	EET CLE	08/26/25 17:25

Client Sample ID: MW-54S_082025

Lab Sample ID: 240-231475-4

Date Collected: 08/20/25 11:30

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	669451	LEE	EET CLE	08/27/25 18:38
Total/NA	Analysis	8260D SIM		1	669266	R5XG	EET CLE	08/26/25 17:49

Client Sample ID: MW-57_082025

Lab Sample ID: 240-231475-5

Date Collected: 08/20/25 12:50

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	669451	LEE	EET CLE	08/27/25 19:01
Total/NA	Analysis	8260D SIM		1	669616	R5XG	EET CLE	08/28/25 12:55

Client Sample ID: MW-70_082025

Lab Sample ID: 240-231475-6

Date Collected: 08/20/25 13:50

Matrix: Water

Date Received: 08/22/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		12.5	669775	LEE	EET CLE	08/29/25 14:47
Total/NA	Analysis	8260D SIM		1	669616	R5XG	EET CLE	08/28/25 13:19

Laboratory References:

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

Eurofins Cleveland

Accreditation/Certification Summary

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

Job ID: 240-231475-1

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	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
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	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-15-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

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

Client Contact		Regulatory program:								TestAmerica Laboratories, Inc.																			
Company Name: Arcadis		Client Project Manager: Megan Meckley		Site Contact: Samantha Szpaichler		Lab Contact: Mike DelMonico		COC No:																					
Address: 28550 Cabot Drive, Suite 500		Telephone: 248-994-2240		Telephone: 248-994-2240		Telephone: 330-497-9396		1 of 1 COCs																					
City/State/Zip: Novi, MI, 48377		Email: megan.meckley@arcadis.com		Analysis Turnaround Time		Analyses		For lab use only																					
Phone: 248-994-2240		Sampler Name: JOE FORTIK		TAT if different from below 10 day ☒ 3 weeks ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day				Walk-in client																					
Project Name: Ford LTP		Method of Shipment/Carrier:						Lab sampling																					
Project Number: 30251157.401.04		Shipping/Tracking No:						Job/SDG No:																					
PO # US3460025888																													
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	ZnO	NaOH	Unpres	Other:			1-DCE 8260D	cis-1,2-DCE 8260D	Trans-1,2-DCE 8260D	PCE 8260D	TCE 8260D	Vinyl Chloride 8260D	1,4-Dioxane 8260D SIM				
TRIP BLANK_ 3	---	---		1							1							NG	X	X	X	X	X						1 Trip Blank
MW-54-082025	8-20-25	1010		6							6							NG	X	X	X	X	X						3 VOAs for 8260D 3 VOAs for 8260D SIM
MW-54-M5-082025	8-20-25	1010		6							6							NG	X	X	X	X	X						RUN MS/MSd
MW-54-M5D-082025	8-20-25	1010		6							6							NG	X	X	X	X	X						RUN MS/MSd
MW-53-082025	8-20-25	1110		6							6							NG	X	X	X	X	X						
MW-54S-082025	8-20-25	1130		6							6							NG	X	X	X	X	X						
MW-57-082025	8-20-25	1250		6							6							NG	X	X	X	X	X						
MW-70-082025	8-20-25	1350		6							6							NG	X	X	X	X	X						
Possible Hazard Identification																		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
☒ Non-Hazard ☐ Flammable ☐ Irritant ☐ Poison B ☐ Unknown																		☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months											
Special Instructions/QC Requirements & Comments:		Onsite																											
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:	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:												
[Signature]	Arcadis	8-20-25 / 1630	[Signature]	Arcadis	8-20-25 / 1630	[Signature]	ARCADIS	8/21/25 1413	[Signature]	EETA	8/21/25 1414	[Signature]	EETA	8/21/25 1414	[Signature]	EURO	8/22/25 800												
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:												
[Signature]	ARCADIS	8/21/25 1413	[Signature]	EURO	8/21/25 1414	[Signature]	EURO	8/21/25 141																					

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____

Client Arcadis Site Name _____ Cooler unpacked by: _____

Cooler Received on 8/22/25 Opened on 8/22/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier ABurns Other _____

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

Eurofins Cooler # EL Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Water Blue Ice Dry Ice Water None _____

1 Cooler temperature upon receipt See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2

-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 NA

4 Did custody papers accompany the sample(s)? Yes No NA

5 Were the custody papers relinquished & signed in the appropriate place? Yes No NA

6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No NA

7 Did all bottles arrive in good condition (Unbroken)? Yes No NA

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No NA

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 NA

10 Were correct bottle(s) used for the test(s) indicated? Yes No NA

11 Sufficient quantity received to perform indicated analyses? Yes No NA

12 Are these work share samples and all listed on the COC? Yes No NA

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# HC463162

14 Were VOAs on the COC? Yes No NA

15 Were air bubbles >6 mm in any VOA vials? Yes No NA

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____

17 Was a LL Hg or Me Hg trip blank present? Yes No NA

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: _____

Labels Verified 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 _____

[illegible]

Temperature readings

Client Sample ID	Lab ID	Container Type	Container pH	Preservation Temp	Preservation Added	Preservation Lot Number
TRIP BLANK_3	240-231475-A-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54_082025	240 231475-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS 082025	240-231475-A-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MSD 082025	240-231475-A-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54 082025	240-231475-B-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS 082025	240-231475-B-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MSD_082025	240-231475-B-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54_082025	240-231475-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS_082025	240-231475-C-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MSD_082025	240-231475-C-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54 082025	240-231475-D-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS_082025	240-231475-D-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MSD 082025	240-231475-D-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54_082025	240-231475-E-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS_082025	240-231475-E-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MSD 082025	240-231475-E-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54_082025	240 231475 F 2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54-MS 082025	240-231475-F-2 MS	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW 54 MSD_082025	240-231475-F-2 MSD	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-53_082025	240-231475-A-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW 53_082025	240 231475-B-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-53_082025	240-231475-C-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-53 082025	240 231475-D-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-53_082025	240-231475-E-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-53 082025	240-231475-F-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S_082025	240-231475-A-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S 082025	240-231475-B-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S_082025	240-231475-C-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S 082025	240-231475-D-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S_082025	240-231475 E-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-54S_082025	240-231475-F-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-57_082025	240-231475 A 5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservation</u> <u>Temp</u>	<u>Preservation</u> <u>Added</u>	<u>Lot Number</u>
MW-57_082025	240-231475 B-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-57_082025	240-231475-C-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-57_082025	240-231475-D-5	Voa Vial 40ml Hydrochloric Acid	_____	_____	_____	_____
MW-57_082025	240-231475-E-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-57_082025	240-231475-F-5	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475 A-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475-B-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475-C-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475-D-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475-E-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-70_082025	240-231475-F-6	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____

DATA VERIFICATION REPORT



September 02, 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 LTP

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 231475-1

Sample date: 2025-08-20

Report received by CADENA: 2025-09-02

Initial Data Verification completed by CADENA: 2025-09-02

Number of Samples:6

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

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

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

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA 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: 231475-1

		Sample Name: TRIP BLANK_3				MW-54_082025				MW-53_082025				MW-54S_082025				MW-57_082025				MW-70_082025			
		Lab Sample ID: 2402314751				2402314752				2402314753				2402314754				2402314755				2402314756			
		Sample Date: 8/20/2025				8/20/2025				8/20/2025				8/20/2025				8/20/2025				8/20/2025			
Analyte	Cas No.	Report		Valid		Report		Valid		Report		Valid		Report		Valid		Report		Valid		Report		Valid	
		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC																									
OSW-8260D																									
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	130	13	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	13	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	1.4	1.0	ug/l	---	0.64	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	710	13	ug/l	---
OSW-8260DSIM																									
1,4-Dioxane	123-91-1					1.5	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	6.8	2.0	ug/l	---