

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-219502-1

Eurofins Cleveland

Job Notes

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Authorization



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Definitions/Glossary

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

Job ID: 240-219502-1

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.
E	Result exceeded calibration range.
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 240-219502-1

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 2/27/2025 8:27 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

GC/MS VOA

Method 8260D_SIM: MS and MSD not ran with samples due to instrument malfunction. The Parent sample for the MS and MSD will not be reported either due to the need to re run it with the other samples. All samples are good to report otherwise.

MW-200S_022525 (240-219502-3), MW-196_022525 (240-219502-4), MW-196S_022525 (240-219502-5) and DUP-06 (240-219502-6)

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: 240-219502-1

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: 240-219502-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219502-1	TRIP BLANK_78	Water	02/25/25 00:00	02/27/25 08:27
240-219502-2	MW-200_022525	Water	02/25/25 10:00	02/27/25 08:27
240-219502-3	MW-200S_022525	Water	02/25/25 11:05	02/27/25 08:27
240-219502-4	MW-196_022525	Water	02/25/25 13:00	02/27/25 08:27
240-219502-5	MW-196S_022525	Water	02/25/25 14:00	02/27/25 08:27
240-219502-6	DUP-06	Water	02/25/25 00:00	02/27/25 08:27

Detection Summary

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

Job ID: 240-219502-1

Client Sample ID: TRIP BLANK_78

Lab Sample ID: 240-219502-1

No Detections.

Client Sample ID: MW-200_022525

Lab Sample ID: 240-219502-2

No Detections.

Client Sample ID: MW-200S_022525

Lab Sample ID: 240-219502-3

No Detections.

Client Sample ID: MW-196_022525

Lab Sample ID: 240-219502-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	470		10	4.6	ug/L	10		8260D	Total/NA
trans-1,2-Dichloroethene	170		10	5.1	ug/L	10		8260D	Total/NA
Trichloroethene	440		10	4.4	ug/L	10		8260D	Total/NA

Client Sample ID: MW-196S_022525

Lab Sample ID: 240-219502-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	70		2.0	0.92	ug/L	2		8260D	Total/NA
trans-1,2-Dichloroethene	2.1		2.0	1.0	ug/L	2		8260D	Total/NA
Trichloroethene	49		2.0	0.88	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-06

Lab Sample ID: 240-219502-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	63		2.0	0.92	ug/L	2		8260D	Total/NA
trans-1,2-Dichloroethene	1.7		1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	56		1.0	0.44	ug/L	1		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: 240-219502-1

Client Sample ID: TRIP BLANK_78

Lab Sample ID: 240-219502-1

Date Collected: 02/25/25 00:00

Matrix: Water

Date Received: 02/27/25 08:27

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			03/04/25 15:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/04/25 15:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/04/25 15:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:07	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/04/25 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		62 - 137		03/04/25 15:07	1
4-Bromofluorobenzene (Surr)	83		56 - 136		03/04/25 15:07	1
Toluene-d8 (Surr)	95		78 - 122		03/04/25 15:07	1
Dibromofluoromethane (Surr)	102		73 - 120		03/04/25 15:07	1

Client Sample Results

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

Job ID: 240-219502-1

Client Sample ID: MW-200_022525

Lab Sample ID: 240-219502-2

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 08:27

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			03/06/25 17:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		68 - 127					03/06/25 17:04	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			03/04/25 15:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/04/25 15:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/04/25 15:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/04/25 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		62 - 137					03/04/25 15:25	1
4-Bromofluorobenzene (Surr)	84		56 - 136					03/04/25 15:25	1
Toluene-d8 (Surr)	98		78 - 122					03/04/25 15:25	1
Dibromofluoromethane (Surr)	109		73 - 120					03/04/25 15:25	1

Client Sample Results

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

Job ID: 240-219502-1

Client Sample ID: MW-200S_022525

Lab Sample ID: 240-219502-3

Date Collected: 02/25/25 11:05

Matrix: Water

Date Received: 02/27/25 08:27

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			03/04/25 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		68 - 127					03/04/25 13:34	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			03/04/25 15:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/04/25 15:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/04/25 15:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 15:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/04/25 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 137					03/04/25 15:43	1
4-Bromofluorobenzene (Surr)	80		56 - 136					03/04/25 15:43	1
Toluene-d8 (Surr)	92		78 - 122					03/04/25 15:43	1
Dibromofluoromethane (Surr)	100		73 - 120					03/04/25 15:43	1

Client Sample Results

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

Job ID: 240-219502-1

Client Sample ID: MW-196_022525

Lab Sample ID: 240-219502-4

Date Collected: 02/25/25 13:00

Matrix: Water

Date Received: 02/27/25 08:27

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			03/04/25 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		68 - 127					03/04/25 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	10	U	10	4.9	ug/L			03/04/25 16:01	10
cis-1,2-Dichloroethene	470		10	4.6	ug/L			03/04/25 16:01	10
Tetrachloroethene	10	U	10	4.4	ug/L			03/04/25 16:01	10
trans-1,2-Dichloroethene	170		10	5.1	ug/L			03/04/25 16:01	10
Trichloroethene	440		10	4.4	ug/L			03/04/25 16:01	10
Vinyl chloride	10	U	10	4.5	ug/L			03/04/25 16:01	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		62 - 137					03/04/25 16:01	10
4-Bromofluorobenzene (Surr)	82		56 - 136					03/04/25 16:01	10
Toluene-d8 (Surr)	98		78 - 122					03/04/25 16:01	10
Dibromofluoromethane (Surr)	108		73 - 120					03/04/25 16:01	10

Client Sample Results

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

Job ID: 240-219502-1

Client Sample ID: MW-196S_022525

Lab Sample ID: 240-219502-5

Date Collected: 02/25/25 14:00

Matrix: Water

Date Received: 02/27/25 08:27

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			03/04/25 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		68 - 127					03/04/25 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/04/25 16:19	2
cis-1,2-Dichloroethene	70		2.0	0.92	ug/L			03/04/25 16:19	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/04/25 16:19	2
trans-1,2-Dichloroethene	2.1		2.0	1.0	ug/L			03/04/25 16:19	2
Trichloroethene	49		2.0	0.88	ug/L			03/04/25 16:19	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			03/04/25 16:19	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 137					03/04/25 16:19	2
4-Bromofluorobenzene (Surr)	78		56 - 136					03/04/25 16:19	2
Toluene-d8 (Surr)	92		78 - 122					03/04/25 16:19	2
Dibromofluoromethane (Surr)	101		73 - 120					03/04/25 16:19	2

Client Sample Results

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

Job ID: 240-219502-1

Client Sample ID: DUP-06

Lab Sample ID: 240-219502-6

Date Collected: 02/25/25 00:00

Matrix: Water

Date Received: 02/27/25 08:27

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			03/04/25 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		68 - 127					03/04/25 14:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/04/25 16:37	1
cis-1,2-Dichloroethene	63		2.0	0.92	ug/L			03/06/25 11:05	2
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 16:37	1
trans-1,2-Dichloroethene	1.7		1.0	0.51	ug/L			03/04/25 16:37	1
Trichloroethene	56		1.0	0.44	ug/L			03/04/25 16:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/04/25 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		62 - 137					03/04/25 16:37	1
1,2-Dichloroethane-d4 (Surr)	101		62 - 137					03/06/25 11:05	2
4-Bromofluorobenzene (Surr)	82		56 - 136					03/04/25 16:37	1
4-Bromofluorobenzene (Surr)	88		56 - 136					03/06/25 11:05	2
Toluene-d8 (Surr)	99		78 - 122					03/04/25 16:37	1
Toluene-d8 (Surr)	98		78 - 122					03/06/25 11:05	2
Dibromofluoromethane (Surr)	105		73 - 120					03/04/25 16:37	1
Dibromofluoromethane (Surr)	105		73 - 120					03/06/25 11:05	2

Surrogate Summary

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

Job ID: 240-219502-1

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)
240-219502-1	TRIP BLANK_78	100	83	95	102
240-219502-2	MW-200_022525	105	84	98	109
240-219502-2 MS	MW-200-MS_022525	89	100	99	94
240-219502-2 MSD	MW-200-MSD_022525	81	91	90	88
240-219502-3	MW-200S_022525	97	80	92	100
240-219502-4	MW-196_022525	102	82	98	108
240-219502-5	MW-196S_022525	97	78	92	101
240-219502-6	DUP-06	102	82	99	105
240-219502-6	DUP-06	101	88	98	105
240-219757-B-24 MS	Matrix Spike	81	90	89	87
240-219757-B-24 MSD	Matrix Spike Duplicate	81	93	89	89
LCS 240-646768/4	Lab Control Sample	78	94	97	86
LCS 240-647055/4	Lab Control Sample	82	96	98	89
MB 240-646768/7	Method Blank	88	83	92	93
MB 240-647055/7	Method Blank	93	82	95	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (68-127)			
240-219502-2	MW-200_022525	104			
240-219502-2 MS	MW-200-MS_022525	102			
240-219502-2 MSD	MW-200-MSD_022525	101			
240-219502-3	MW-200S_022525	106			
240-219502-4	MW-196_022525	101			
240-219502-5	MW-196S_022525	101			
240-219502-6	DUP-06	105			
LCS 240-646829/4	Lab Control Sample	97			
LCS 240-647056/13	Lab Control Sample	99			
MB 240-646829/6	Method Blank	105			
MB 240-647056/15	Method Blank	98			
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					

QC Sample Results

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

Job ID: 240-219502-1

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

Lab Sample ID: MB 240-646768/7

Matrix: Water

Analysis Batch: 646768

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			03/04/25 10:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/04/25 10:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 10:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/04/25 10:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/04/25 10:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/04/25 10:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		62 - 137		03/04/25 10:39	1
4-Bromofluorobenzene (Surr)	83		56 - 136		03/04/25 10:39	1
Toluene-d8 (Surr)	92		78 - 122		03/04/25 10:39	1
Dibromofluoromethane (Surr)	93		73 - 120		03/04/25 10:39	1

Lab Sample ID: LCS 240-646768/4

Matrix: Water

Analysis Batch: 646768

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	25.0		ug/L		100	63 - 134
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	77 - 123
Tetrachloroethene	25.0	21.9		ug/L		88	76 - 123
trans-1,2-Dichloroethene	25.0	25.9		ug/L		104	75 - 124
Trichloroethene	25.0	25.3		ug/L		101	70 - 122
Vinyl chloride	12.5	11.6		ug/L		93	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	78		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	86		73 - 120

Lab Sample ID: 240-219502-2 MS

Matrix: Water

Analysis Batch: 646768

Client Sample ID: MW-200-MS_022525

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	24.7		ug/L		99	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	25.0		ug/L		100	66 - 128
Tetrachloroethene	1.0	U	25.0	19.8		ug/L		79	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	24.8		ug/L		99	56 - 136
Trichloroethene	1.0	U	25.0	23.4		ug/L		94	61 - 124
Vinyl chloride	1.0	U	12.5	11.4		ug/L		91	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		62 - 137
4-Bromofluorobenzene (Surr)	100		56 - 136
Toluene-d8 (Surr)	99		78 - 122

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-219502-1

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

Lab Sample ID: 240-219502-2 MS

Matrix: Water

Analysis Batch: 646768

Client Sample ID: MW-200-MS_022525

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	94		73 - 120

Lab Sample ID: 240-219502-2 MSD

Matrix: Water

Analysis Batch: 646768

Client Sample ID: MW-200-MSD_022525

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	26.2		ug/L		105	56 - 135	6	26
cis-1,2-Dichloroethene	1.0	U	25.0	26.3		ug/L		105	66 - 128	5	14
Tetrachloroethene	1.0	U	25.0	20.8		ug/L		83	62 - 131	5	20
trans-1,2-Dichloroethene	1.0	U	25.0	25.9		ug/L		104	56 - 136	4	15
Trichloroethene	1.0	U	25.0	25.2		ug/L		101	61 - 124	7	15
Vinyl chloride	1.0	U	12.5	12.8		ug/L		102	43 - 157	11	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		62 - 137
4-Bromofluorobenzene (Surr)	91		56 - 136
Toluene-d8 (Surr)	90		78 - 122
Dibromofluoromethane (Surr)	88		73 - 120

Lab Sample ID: MB 240-647055/7

Matrix: Water

Analysis Batch: 647055

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 10:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/06/25 10:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 10:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/06/25 10:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/06/25 10:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/06/25 10:29	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		62 - 137		03/06/25 10:29	1
4-Bromofluorobenzene (Surr)	82		56 - 136		03/06/25 10:29	1
Toluene-d8 (Surr)	95		78 - 122		03/06/25 10:29	1
Dibromofluoromethane (Surr)	97		73 - 120		03/06/25 10:29	1

Lab Sample ID: LCS 240-647055/4

Matrix: Water

Analysis Batch: 647055

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	25.1		ug/L		100	63 - 134
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	77 - 123
Tetrachloroethene	25.0	21.3		ug/L		85	76 - 123
trans-1,2-Dichloroethene	25.0	25.7		ug/L		103	75 - 124
Trichloroethene	25.0	24.4		ug/L		97	70 - 122

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-219502-1

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

Lab Sample ID: LCS 240-647055/4

Matrix: Water

Analysis Batch: 647055

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	12.6		ug/L		101	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	98		78 - 122
Dibromofluoromethane (Surr)	89		73 - 120

Lab Sample ID: 240-219757-B-24 MS

Matrix: Water

Analysis Batch: 647055

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	10	U	250	236		ug/L		94	56 - 135
cis-1,2-Dichloroethene	2300	E	250	2010	E 4	ug/L		-109	66 - 128
Tetrachloroethene	10	U	250	196		ug/L		78	62 - 131
trans-1,2-Dichloroethene	150		250	374		ug/L		92	56 - 136
Trichloroethene	10	U	250	245		ug/L		98	61 - 124
Vinyl chloride	2300	E	125	1810	E 4	ug/L		-378	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		62 - 137
4-Bromofluorobenzene (Surr)	90		56 - 136
Toluene-d8 (Surr)	89		78 - 122
Dibromofluoromethane (Surr)	87		73 - 120

Lab Sample ID: 240-219757-B-24 MSD

Matrix: Water

Analysis Batch: 647055

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	10	U	250	257		ug/L		103	56 - 135	8	26
cis-1,2-Dichloroethene	2300	E	250	2030	E 4	ug/L		-103	66 - 128	1	14
Tetrachloroethene	10	U	250	204		ug/L		81	62 - 131	4	20
trans-1,2-Dichloroethene	150		250	386		ug/L		96	56 - 136	3	15
Trichloroethene	10	U	250	257		ug/L		103	61 - 124	5	15
Vinyl chloride	2300	E	125	1820	E 4	ug/L		-370	43 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		62 - 137
4-Bromofluorobenzene (Surr)	93		56 - 136
Toluene-d8 (Surr)	89		78 - 122
Dibromofluoromethane (Surr)	89		73 - 120

QC Sample Results

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

Job ID: 240-219502-1

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

Lab Sample ID: MB 240-646829/6

Matrix: Water

Analysis Batch: 646829

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			03/04/25 12:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		68 - 127					03/04/25 12:24	1

Lab Sample ID: LCS 240-646829/4

Matrix: Water

Analysis Batch: 646829

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	9.00		ug/L		90	75 - 121
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	97		68 - 127				

Lab Sample ID: MB 240-647056/15

Matrix: Water

Analysis Batch: 647056

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			03/06/25 16:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		68 - 127					03/06/25 16:41	1

Lab Sample ID: LCS 240-647056/13

Matrix: Water

Analysis Batch: 647056

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	9.54		ug/L		95	75 - 121
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	99		68 - 127				

Lab Sample ID: 240-219502-2 MS

Matrix: Water

Analysis Batch: 647056

Client Sample ID: MW-200-MS_022525

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	9.35		ug/L		93	20 - 180
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	102		68 - 127						

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-219502-1

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

Lab Sample ID: 240-219502-2 MSD				Client Sample ID: MW-200-MSD_022525								
Matrix: Water				Prep Type: Total/NA								
Analysis Batch: 647056												
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	9.69		ug/L		97	20 - 180	4	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1,2-Dichloroethane-d4 (Surr)	101		68 - 127									

QC Association Summary

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

Job ID: 240-219502-1

GC/MS VOA

Analysis Batch: 646768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219502-1	TRIP BLANK_78	Total/NA	Water	8260D	
240-219502-2	MW-200_022525	Total/NA	Water	8260D	
240-219502-3	MW-200S_022525	Total/NA	Water	8260D	
240-219502-4	MW-196_022525	Total/NA	Water	8260D	
240-219502-5	MW-196S_022525	Total/NA	Water	8260D	
240-219502-6	DUP-06	Total/NA	Water	8260D	
MB 240-646768/7	Method Blank	Total/NA	Water	8260D	
LCS 240-646768/4	Lab Control Sample	Total/NA	Water	8260D	
240-219502-2 MS	MW-200-MS_022525	Total/NA	Water	8260D	
240-219502-2 MSD	MW-200-MSD_022525	Total/NA	Water	8260D	

Analysis Batch: 646829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219502-3	MW-200S_022525	Total/NA	Water	8260D SIM	
240-219502-4	MW-196_022525	Total/NA	Water	8260D SIM	
240-219502-5	MW-196S_022525	Total/NA	Water	8260D SIM	
240-219502-6	DUP-06	Total/NA	Water	8260D SIM	
MB 240-646829/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-646829/4	Lab Control Sample	Total/NA	Water	8260D SIM	

Analysis Batch: 647055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219502-6	DUP-06	Total/NA	Water	8260D	
MB 240-647055/7	Method Blank	Total/NA	Water	8260D	
LCS 240-647055/4	Lab Control Sample	Total/NA	Water	8260D	
240-219757-B-24 MS	Matrix Spike	Total/NA	Water	8260D	
240-219757-B-24 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 647056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219502-2	MW-200_022525	Total/NA	Water	8260D SIM	
MB 240-647056/15	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-647056/13	Lab Control Sample	Total/NA	Water	8260D SIM	
240-219502-2 MS	MW-200-MS_022525	Total/NA	Water	8260D SIM	
240-219502-2 MSD	MW-200-MSD_022525	Total/NA	Water	8260D SIM	

Lab Chronicle

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

Job ID: 240-219502-1

Client Sample ID: TRIP BLANK_78

Lab Sample ID: 240-219502-1

Date Collected: 02/25/25 00:00

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	646768	LEE	EET CLE	03/04/25 15:07

Client Sample ID: MW-200_022525

Lab Sample ID: 240-219502-2

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	646768	LEE	EET CLE	03/04/25 15:25
Total/NA	Analysis	8260D SIM		1	647056	R5XG	EET CLE	03/06/25 17:04

Client Sample ID: MW-200S_022525

Lab Sample ID: 240-219502-3

Date Collected: 02/25/25 11:05

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	646768	LEE	EET CLE	03/04/25 15:43
Total/NA	Analysis	8260D SIM		1	646829	R5XG	EET CLE	03/04/25 13:34

Client Sample ID: MW-196_022525

Lab Sample ID: 240-219502-4

Date Collected: 02/25/25 13:00

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	646768	LEE	EET CLE	03/04/25 16:01
Total/NA	Analysis	8260D SIM		1	646829	R5XG	EET CLE	03/04/25 13:57

Client Sample ID: MW-196S_022525

Lab Sample ID: 240-219502-5

Date Collected: 02/25/25 14:00

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		2	646768	LEE	EET CLE	03/04/25 16:19
Total/NA	Analysis	8260D SIM		1	646829	R5XG	EET CLE	03/04/25 14:21

Client Sample ID: DUP-06

Lab Sample ID: 240-219502-6

Date Collected: 02/25/25 00:00

Matrix: Water

Date Received: 02/27/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	646768	LEE	EET CLE	03/04/25 16:37
Total/NA	Analysis	8260D		2	647055	LEE	EET CLE	03/06/25 11:05
Total/NA	Analysis	8260D SIM		1	646829	R5XG	EET CLE	03/04/25 14:44

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: 240-219502-1

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

Chain of Custody Record

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

Client Contact			Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other										TestAmerica Laboratories, Inc.																		
Company Name: Arcadis			Client Project Manager: Megan Meckley					Site Contact: Samantha Szpachler					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: kristoffer.hinskey@arcadis.com					Analysis Turnaround Time					Analyses					For lab use only													
Phone: 248-994-2240			Sampler Name: <i>Maryam Hanani</i>					TAT if different from below										Walk-in client													
Project Name: Ford LTP			Method of Shipment/Carrier:					10 day										Lab sampling													
Project Number: 30206169.0401.03			Shipping/Tracking No:															Job/SDG No:													
PO # US3460021848																															
Sample Identification			Sample Date	Sample Time	Matrix					Containers & Preservatives					Sample Specific Notes / Special Instructions:																
					Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnO	NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-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_ 78			----	---	1						1								NG	X	X	X	X	X	X				1 Trip Blank		
MW-200_022525			2/25/25	1000	6						6								NG	X	X	X	X	X	X				3 VOAs for 8260D 3 VOAs for 8260D SIM		
MW-200-MS_022525			2/25/25	1000	6						6								NG	X	X	X	X	X	X				Run MS/MSD		
MW-200-MSD_022525			2/25/25	1000	6						6								NG	X	X	X	X	X	X						
MW-200S_022525			2/25/25	1105	6						6								NG	X	X	X	X	X	X						
MW-196_022525			2/25/25	1300	6						6								NG	X	X	X	X	X	X						
MW-196S_022525			2/25/25	1400	6						6								NG	X	X	X	X	X	X						
DUP-06			2/25/25	—	6						6								NG	X	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: <i>Onsite</i>																															
Submit all results through Cadena at jtomalia@cadenaco.com . Cadena #E203728																															
Level IV Reporting requested.																															
Relinquished by: <i>Maryam Hanani</i>					Company: Arcadis					Date/Time: 2/25/25 1515					Received by: <i>Novi Cold Storage</i>					Company: Arcadis					Date/Time: 2/25/25 1515						
Relinquished by: <i>[Signature]</i>					Company: Arcadis					Date/Time: 2/26/25 1525					Received by: <i>[Signature]</i>					Company: EETA					Date/Time: 2/26/25 1526						
Relinquished by: <i>[Signature]</i>					Company: EETA					Date/Time: 2/26/25 1527					Received in Laboratory by: <i>MALISSA LOAR</i>					Company: EETA					Date/Time: 2/27/25 8A						



240-219502 COC

Eurofins - Cleveland Sample Receipt Form/Narrative Barberton Facility		Login # _____
Client <u>ARCADIS</u> Site Name _____		Cooler unpacked by: MALISSA LOAR
Cooler Received on <u>2/27/25</u> Opened on <u>2/27/25</u>		
FedEx: 1 st Grd Exp <u>UPS</u> FAS <u>Waypoint</u> Client Drop Off Eurofins Courier Other _____		
Receipt After-hours, Drop-off Date/Time _____ Storage Location _____		
Eurofins Cooler # <u>CC</u> Foam Box Client Cooler Box Other _____		
Packing material used: <u>Bubble Wrap</u> Foam Plastic Bag None Other _____		
COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water None _____		
1 Cooler temperature upon receipt <u>See Multiple Cooler Form</u>		
IR GUN # <u>13</u> (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 _____ - Were the seals on the outside of the cooler(s) signed & dated? Yes <u>NO</u> No <u>NA</u> - Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes <u>NO</u> No <u>NA</u> - Were tamper/custody seals intact and uncompromised? Yes <u>NO</u> No <u>NA</u> 3 Shippers' packing slip attached to the cooler(s)? Yes <u>NO</u> No <u>NA</u> 4. Did custody papers accompany the sample(s)? Yes <u>NO</u> No <u>NA</u> 5 Were the custody papers relinquished & signed in the appropriate place? Yes <u>NO</u> No <u>NA</u> 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes <u>NO</u> No <u>NA</u> 7 Did all bottles arrive in good condition (Unbroken)? Yes <u>NO</u> No <u>NA</u> 8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes <u>NO</u> No <u>NA</u> 9 For each sample, does the COC specify preservatives <u>Y/N</u> , # of containers <u>Y/N</u> , and sample type of grab/comp <u>Y/N</u> ? Yes <u>NO</u> No <u>NA</u> 10 Were correct bottle(s) used for the test(s) indicated? Yes <u>NO</u> No <u>NA</u> 11 Sufficient quantity received to perform indicated analyses? Yes <u>NO</u> No <u>NA</u> 12. Are these work share samples and all listed on the COC? Yes <u>NO</u> No <u>NA</u> 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 <u>NO</u> No <u>NA</u> pH Strip Lot# HC448976 14 Were VOAs on the COC? Yes <u>NO</u> No <u>NA</u> 15 Were air bubbles > 6 mm in any VOA vials? <u>Yes</u> <u>NO</u> No <u>NA</u> 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes <u>NO</u> No <u>NA</u> 17 Was a LL Hg or Me Hg trip blank present? Yes <u>NO</u> No <u>NA</u>		
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____ Concerning _____		
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page		Samples processed by: _____
19 SAMPLE CONDITION		
Sample(s) _____ were received after the recommended holding time had expired		
Sample(s) _____ were received in a broken container		
Sample(s) _____ were received with bubble > 6 mm in diameter (Notify PM)		
20. SAMPLE PRESERVATION		
Sample(s) _____ were further preserved in the laboratory		
Time preserved _____ Preservative(s) added/Lot number(s) _____		
VOA Sample Preservation - Date/Time VOAs Frozen _____		

DATA VERIFICATION REPORT



March 11, 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: 219502-1

Sample date: 2025-02-25

Report received by CADENA: 2025-03-11

Initial Data Verification completed by CADENA: 2025-03-11

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.

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.

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: 219502-1

		Sample Name: TRIP BLANK_78				MW-200_022525				MW-200S_022525				MW-196_022525				MW-196S_022525				DUP-06									
		Lab Sample ID: 2402195021				2402195022				2402195023				2402195024				2402195025				2402195026									
		Sample Date: 2/25/2025				2/25/2025				2/25/2025				2/25/2025				2/25/2025				2/25/2025									
		Report				Valid		Report				Valid		Report				Valid		Report				Valid		Report				Valid	
Analyte	Cas No.	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	10	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---						
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	470	10	ug/l	---	70	2.0	ug/l	---	63	2.0	ug/l	---						
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	10	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---						
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	170	10	ug/l	---	2.1	2.0	ug/l	---	1.7	1.0	ug/l	---						
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	440	10	ug/l	---	49	2.0	ug/l	---	56	1.0	ug/l	---						
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	10	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---						
OSW-8260DSIM																															
1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---						