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ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Megan Meckley
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JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-231294-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

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Table of Contents

Definitions/Glossary

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

Job ID: 240-231294-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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

Job Narrative
240-231294-1

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 8/21/2025 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 2.6°C and 2.8°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 240-668844 recovered above the upper control limit for 1,1-Dichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:TRIP BLANK_124 (240-231294-1), MW-42_081925 (240-231294-2), MW-41_081925 (240-231294-3), MW-40_081925 (240-231294-4) and (240-231293-B-4).

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

Method Summary

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

Job ID: 240-231294-1

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: 240-231294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-231294-1	TRIP BLANK_124	Water	08/19/25 00:00	08/21/25 08:00	Michigan
240-231294-2	MW-42_081925	Water	08/19/25 10:50	08/21/25 08:00	Michigan
240-231294-3	MW-41_081925	Water	08/19/25 12:25	08/21/25 08:00	Michigan
240-231294-4	MW-40_081925	Water	08/19/25 13:30	08/21/25 08:00	Michigan

Detection Summary

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

Job ID: 240-231294-1

Client Sample ID: TRIP BLANK_124 — Lab Sample ID: 240-231294-1

No Detections.

Client Sample ID: MW-42_081925 — Lab Sample ID: 240-231294-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	0.83	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-41_081925 — Lab Sample ID: 240-231294-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	11		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-40_081925 — Lab Sample ID: 240-231294-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 240-231294-1

Client Sample ID: TRIP BLANK_124
Date Collected: 08/19/25 00:00
Date Received: 08/21/25 08:00

Lab Sample ID: 240-231294-1
Matrix: Water

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			08/22/25 13:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/22/25 13:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 13:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/22/25 13:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 13:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/22/25 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*62 - 137*		*08/22/25 13:49*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*08/22/25 13:49*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*08/22/25 13:49*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*08/22/25 13:49*	*1*

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

Job ID: 240-231294-1

Client Sample ID: MW-42_081925

Date Collected: 08/19/25 10:50
Date Received: 08/21/25 08:00

Lab Sample ID: 240-231294-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.4	J	2.0	0.86	ug/L			08/25/25 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*68 - 127*		*08/25/25 15:49*	*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			08/22/25 18:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/22/25 18:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/22/25 18:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:07	1
Vinyl chloride	0.83	J	1.0	0.45	ug/L			08/22/25 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*62 - 137*		*08/22/25 18:07*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*08/22/25 18:07*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*08/22/25 18:07*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*08/22/25 18:07*	*1*

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

Job ID: 240-231294-1

Client Sample ID: MW-41_081925
Date Collected: 08/19/25 12:25
Date Received: 08/21/25 08:00

Lab Sample ID: 240-231294-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	11		2.0	0.86	ug/L			08/25/25 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*68 - 127*		*08/25/25 16:13*	*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			08/22/25 18:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/22/25 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/22/25 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:33	1
Vinyl chloride	1.1		1.0	0.45	ug/L			08/22/25 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*62 - 137*		*08/22/25 18:33*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*08/22/25 18:33*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*08/22/25 18:33*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*08/22/25 18:33*	*1*

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

Job ID: 240-231294-1

Client Sample ID: MW-40_081925
Date Collected: 08/19/25 13:30
Date Received: 08/21/25 08:00

Lab Sample ID: 240-231294-4
Matrix: Water

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			08/25/25 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*68 - 127*		*08/25/25 16:37*	*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			08/22/25 18:59	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			08/22/25 18:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/22/25 18:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 18:59	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			08/22/25 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*62 - 137*		*08/22/25 18:59*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*08/22/25 18:59*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*08/22/25 18:59*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*08/22/25 18:59*	*1*

Surrogate Summary

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

Job ID: 240-231294-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-231293-B-4 MS	Matrix Spike	113	102	104	102
240-231293-B-4 MSD	Matrix Spike Duplicate	113	100	102	101
240-231294-1	TRIP BLANK_124	114	94	100	100
240-231294-2	MW-42_081925	113	90	99	101
240-231294-3	MW-41_081925	119	94	101	103
240-231294-4	MW-40_081925	116	92	100	103
LCS 240-668844/5	Lab Control Sample	110	99	101	101
MB 240-668844/10	Method Blank	114	97	103	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(68-127)
240-231294-2	MW-42_081925	80
240-231294-3	MW-41_081925	82
240-231294-4	MW-40_081925	82
240-231362-C-2 MS	Matrix Spike	77
240-231362-C-2 MSD	Matrix Spike Duplicate	77
LCS 240-669181/5	Lab Control Sample	81
MB 240-669181/7	Method Blank	81

Surrogate Legend

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

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

Lab Sample ID: MB 240-668844/10
Matrix: Water
Analysis Batch: 668844

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			08/22/25 12:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/22/25 12:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 12:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/22/25 12:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/22/25 12:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/22/25 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*62 - 137*		*08/22/25 12:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*08/22/25 12:57*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*08/22/25 12:57*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*08/22/25 12:57*	*1*

Lab Sample ID: LCS 240-668844/5
Matrix: Water
Analysis Batch: 668844

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			20.0	26.4		ug/L		132	63 - 134		
cis-1,2-Dichloroethene			20.0	19.8		ug/L		99	77 - 123		
Tetrachloroethene			20.0	20.2		ug/L		101	76 - 123		
trans-1,2-Dichloroethene			20.0	22.7		ug/L		114	75 - 124		
Trichloroethene			20.0	19.7		ug/L		99	70 - 122		
Vinyl chloride			20.0	20.0		ug/L		100	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*101*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: 240-231293-B-4 MS
Matrix: Water
Analysis Batch: 668844

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	20.0	23.9		ug/L		120	56 - 135		
cis-1,2-Dichloroethene	1.0	U	20.0	18.5		ug/L		93	66 - 128		
Tetrachloroethene	1.0	U	20.0	19.0		ug/L		95	62 - 131		
trans-1,2-Dichloroethene	1.0	U	20.0	21.4		ug/L		107	56 - 136		
Trichloroethene	1.0	U	20.0	17.7		ug/L		88	61 - 124		
Vinyl chloride	1.0	U	20.0	20.0		ug/L		100	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*104*		*78 - 122*

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

Lab Sample ID: 240-231293-B-4 MS
Matrix: Water
Analysis Batch: 668844

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*73 - 120*

Lab Sample ID: 240-231293-B-4 MSD
Matrix: Water
Analysis Batch: 668844

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	20.0	26.6		ug/L		133	56 - 135	11	26
cis-1,2-Dichloroethene	1.0	U	20.0	20.0		ug/L		100	66 - 128	8	14
Tetrachloroethene	1.0	U	20.0	21.7		ug/L		108	62 - 131	13	20
trans-1,2-Dichloroethene	1.0	U	20.0	23.0		ug/L		115	56 - 136	7	15
Trichloroethene	1.0	U	20.0	19.8		ug/L		99	61 - 124	11	15
Vinyl chloride	1.0	U	20.0	19.9		ug/L		99	43 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*62 - 137*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

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

Lab Sample ID: MB 240-669181/7
Matrix: Water
Analysis Batch: 669181

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			08/25/25 14:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*81*		*68 - 127*		*08/25/25 14:37*	*1*

Lab Sample ID: LCS 240-669181/5
Matrix: Water
Analysis Batch: 669181

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	7.54		ug/L		75	75 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*81*		*68 - 127*

Lab Sample ID: 240-231362-C-2 MS
Matrix: Water
Analysis Batch: 669181

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	8.17		ug/L		82	20 - 180

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

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*77*		*68 - 127*

Lab Sample ID: 240-231362-C-2 MSD
Matrix: Water
Analysis Batch: 669181

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	7.83		ug/L		78	20 - 180	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*77*		*68 - 127*

QC Association Summary

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

Job ID: 240-231294-1

GC/MS VOA

Analysis Batch: 668844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231294-1	TRIP BLANK_124	Total/NA	Water	8260D	
240-231294-2	MW-42_081925	Total/NA	Water	8260D	
240-231294-3	MW-41_081925	Total/NA	Water	8260D	
240-231294-4	MW-40_081925	Total/NA	Water	8260D	
MB 240-668844/10	Method Blank	Total/NA	Water	8260D	
LCS 240-668844/5	Lab Control Sample	Total/NA	Water	8260D	
240-231293-B-4 MS	Matrix Spike	Total/NA	Water	8260D	
240-231293-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 669181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231294-2	MW-42_081925	Total/NA	Water	8260D SIM	
240-231294-3	MW-41_081925	Total/NA	Water	8260D SIM	
240-231294-4	MW-40_081925	Total/NA	Water	8260D SIM	
MB 240-669181/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-669181/5	Lab Control Sample	Total/NA	Water	8260D SIM	
240-231362-C-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-231362-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Lab Chronicle

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

Job ID: 240-231294-1

Client Sample ID: TRIP BLANK_124

Lab Sample ID: 240-231294-1

Date Collected: 08/19/25 00:00

Matrix: Water

Date Received: 08/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	668844	AJS	EET CLE	08/22/25 13:49

Client Sample ID: MW-42_081925

Lab Sample ID: 240-231294-2

Date Collected: 08/19/25 10:50

Matrix: Water

Date Received: 08/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	668844	AJS	EET CLE	08/22/25 18:07
Total/NA	Analysis	8260D SIM		1	669181	R5XG	EET CLE	08/25/25 15:49

Client Sample ID: MW-41_081925

Lab Sample ID: 240-231294-3

Date Collected: 08/19/25 12:25

Matrix: Water

Date Received: 08/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	668844	AJS	EET CLE	08/22/25 18:33
Total/NA	Analysis	8260D SIM		1	669181	R5XG	EET CLE	08/25/25 16:13

Client Sample ID: MW-40_081925

Lab Sample ID: 240-231294-4

Date Collected: 08/19/25 13:30

Matrix: Water

Date Received: 08/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	668844	AJS	EET CLE	08/22/25 18:59
Total/NA	Analysis	8260D SIM		1	669181	R5XG	EET CLE	08/25/25 16:37

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 240-231294-1

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

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Megan Meckley	Site Contact: Samantha Szpaichler	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				1 of 1 COCs
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 248-994-2240	Telephone: 330-497-9396	For lab use only
City/State/Zip: Novi, MI, 48377	Email: megan.meckley@arcadis.com	Analysis Turnaround Time		Walk-in client
Phone: 248-994-2240	Sampler Name: Maryam Hanani	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab sampling
Project Name: Ford LTP	Method of Shipment/Carrier:	10 day		Job/SDG No:
Project Number: 30251157.401.04	Shipping/Tracking No:			
PO # US3460025888				

240-231294 COC

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/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	Sample Specific Notes / Special Instructions:
✓ TRIP BLANK_124	----	---		1						1					N	G	X	X	X	X	X	X		1 Trip Blank
✓ MW-42_081925	8/19/25	1050		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260D 3 VOAs for 8260D SIM
✓ MW-41_081925	8/19/25	1225		6						6					N	G	X	X	X	X	X	X	X	
✓ MW-40_081925	8/19/25	1330		6						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

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:
Maryam Hanani	Arcadis	8/19/25 1440	Non Cold Storage	Arcadis	8/19/25 1440
Samantha Szpaichler	Arcadis	8/20/25 1120	Molly McCall	EEM	8/20/25 1120
Molly McCall	EEM	8/20/25 1120	Jolene Pyles	EURO	8/21/25 0800

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Arcadis Site Name

Cooler Received on 8/21/25 Opened on 8/21/25

Cooler unpacked by: JPYLES

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

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

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt — See Multiple Cooler Form

IR GUN # 13 (CF +.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17. Was a LL Hg or Me Hg trip blank present?	Yes	No

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

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

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:

Login # : ____________

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	2.4	2.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	2.6	2.8	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

8/21/2025

Login Container Summary Report

240-231294

8/26/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
TRIP BLANK_124	240-231294-A-1	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-A-2	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-B-2	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-C-2	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-D-2	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-E-2	Voa Vial 40ml - Hydrochloric Acid				
MW-42_081925	240-231294-F-2	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-A-3	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-B-3	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-C-3	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-D-3	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-E-3	Voa Vial 40ml - Hydrochloric Acid				
MW-41_081925	240-231294-F-3	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-A-4	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-B-4	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-C-4	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-D-4	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-E-4	Voa Vial 40ml - Hydrochloric Acid				
MW-40_081925	240-231294-F-4	Voa Vial 40ml - Hydrochloric Acid				

DATA VERIFICATION REPORT

August 27, 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: 231294-1
Sample date: 2025-08-19
Report received by CADENA: 2025-08-27
Initial Data Verification completed by CADENA: 2025-08-27
Number of Samples:4
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 CCV response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

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

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 contaminates) 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 contaminates) 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: 231294-1

		Sample Name:	TRIP BLANK_124				MW-42_081925				MW-41_081925				MW-40_081925			
		Lab Sample ID:	2402312941				2402312942				2402312943				2402312944			
		Sample Date:	8/19/2025				8/19/2025				8/19/2025				8/19/2025			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid 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	---
cis-1,2-Dichloroethene	156-59-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	2.0	1.0	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	---
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	---
Trichloroethene	79-01-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4		ND	1.0	ug/l	---	0.83	1.0	ug/l	J	1.1	1.0	ug/l	---	1.2	1.0	ug/l	---
OSW-8260DSIM																		
1,4-Dioxane	123-91-1						1.4	2.0	ug/l	J	11	2.0	ug/l	---	ND	2.0	ug/l	---