

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-225264-1

Eurofins Cleveland

Job Notes

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

Authorization



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Authorized for release by
Michael DelMonico, Project Manager I
Michael.DelMonico@et.eurofinsus.com
(330)966-9783



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Definitions/Glossary

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

Job ID: 240-225264-1

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

Case Narrative

Client: Arcadis US Inc.
Project: Ford LTP

Job ID: 240-225264-1

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Job Narrative 240-225264-1

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 5/24/2025 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 0.7°C and 0.8°C.

GC/MS VOA

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: 240-225264-1

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: 240-225264-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-225264-1	TRIP BLANK_75	Water	05/20/25 00:00	05/24/25 08:00
240-225264-2	MW-44_052025	Water	05/20/25 09:45	05/24/25 08:00
240-225264-3	PW-16-01_052025	Water	05/20/25 10:55	05/24/25 08:00
240-225264-4	MW-57_052025	Water	05/20/25 12:30	05/24/25 08:00
240-225264-5	MW-53_052025	Water	05/20/25 13:50	05/24/25 08:00
240-225264-6	MW-122_052025	Water	05/20/25 14:50	05/24/25 08:00

Detection Summary

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

Job ID: 240-225264-1

Client Sample ID: TRIP BLANK_75

Lab Sample ID: 240-225264-1

No Detections.

Client Sample ID: MW-44_052025

Lab Sample ID: 240-225264-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	5.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: PW-16-01_052025

Lab Sample ID: 240-225264-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	50		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	3.3		1.0	0.51	ug/L	1		8260D	Total/NA
Vinyl chloride	890		20	9.0	ug/L	20		8260D	Total/NA

Client Sample ID: MW-57_052025

Lab Sample ID: 240-225264-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	0.71	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-53_052025

Lab Sample ID: 240-225264-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	0.74	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-122_052025

Lab Sample ID: 240-225264-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Vinyl chloride	2.7		1.0	0.45	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: 240-225264-1

Client Sample ID: TRIP BLANK_75

Lab Sample ID: 240-225264-1

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/24/25 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			05/29/25 18:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/29/25 18:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/29/25 18:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/29/25 18:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/29/25 18:07	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/29/25 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		62 - 137		05/29/25 18:07	1
4-Bromofluorobenzene (Surr)	90		56 - 136		05/29/25 18:07	1
Toluene-d8 (Surr)	104		78 - 122		05/29/25 18:07	1
Dibromofluoromethane (Surr)	114		73 - 120		05/29/25 18:07	1

Client Sample Results

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

Job ID: 240-225264-1

Client Sample ID: MW-44_052025

Lab Sample ID: 240-225264-2

Date Collected: 05/20/25 09:45

Matrix: Water

Date Received: 05/24/25 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	4.0		2.0	0.86	ug/L			05/30/25 15:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		68 - 127					05/30/25 15:02	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			05/30/25 00:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/30/25 00:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 00:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/30/25 00:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 00:46	1
Vinyl chloride	5.4		1.0	0.45	ug/L			05/30/25 00:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		62 - 137					05/30/25 00:46	1
4-Bromofluorobenzene (Surr)	88		56 - 136					05/30/25 00:46	1
Toluene-d8 (Surr)	102		78 - 122					05/30/25 00:46	1
Dibromofluoromethane (Surr)	106		73 - 120					05/30/25 00:46	1

Client Sample Results

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

Job ID: 240-225264-1

Client Sample ID: PW-16-01_052025

Lab Sample ID: 240-225264-3

Date Collected: 05/20/25 10:55

Matrix: Water

Date Received: 05/24/25 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	1.0	J	2.0	0.86	ug/L			05/30/25 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		68 - 127					05/30/25 15:25	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			05/30/25 01:11	1
cis-1,2-Dichloroethene	50		1.0	0.46	ug/L			05/30/25 01:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 01:11	1
trans-1,2-Dichloroethene	3.3		1.0	0.51	ug/L			05/30/25 01:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 01:11	1
Vinyl chloride	890		20	9.0	ug/L			06/03/25 17:32	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		62 - 137					05/30/25 01:11	1
1,2-Dichloroethane-d4 (Surr)	110		62 - 137					06/03/25 17:32	20
4-Bromofluorobenzene (Surr)	89		56 - 136					05/30/25 01:11	1
4-Bromofluorobenzene (Surr)	89		56 - 136					06/03/25 17:32	20
Toluene-d8 (Surr)	104		78 - 122					05/30/25 01:11	1
Toluene-d8 (Surr)	102		78 - 122					06/03/25 17:32	20
Dibromofluoromethane (Surr)	108		73 - 120					05/30/25 01:11	1
Dibromofluoromethane (Surr)	103		73 - 120					06/03/25 17:32	20

Client Sample Results

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

Job ID: 240-225264-1

Client Sample ID: MW-57_052025

Lab Sample ID: 240-225264-4

Date Collected: 05/20/25 12:30

Matrix: Water

Date Received: 05/24/25 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	1.3	J	2.0	0.86	ug/L			05/30/25 15:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		68 - 127					05/30/25 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			06/02/25 18:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/02/25 18:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/02/25 18:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/02/25 18:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/02/25 18:04	1
Vinyl chloride	0.71	J	1.0	0.45	ug/L			06/02/25 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 137					06/02/25 18:04	1
4-Bromofluorobenzene (Surr)	91		56 - 136					06/02/25 18:04	1
Toluene-d8 (Surr)	106		78 - 122					06/02/25 18:04	1
Dibromofluoromethane (Surr)	116		73 - 120					06/02/25 18:04	1

Client Sample Results

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

Job ID: 240-225264-1

Client Sample ID: MW-53_052025

Lab Sample ID: 240-225264-5

Date Collected: 05/20/25 13:50

Matrix: Water

Date Received: 05/24/25 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	1.2	J	2.0	0.86	ug/L			05/30/25 16:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		68 - 127					05/30/25 16:12	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			05/30/25 02:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/30/25 02:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 02:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/30/25 02:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 02:04	1
Vinyl chloride	0.74	J	1.0	0.45	ug/L			05/30/25 02:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		62 - 137					05/30/25 02:04	1
4-Bromofluorobenzene (Surr)	86		56 - 136					05/30/25 02:04	1
Toluene-d8 (Surr)	103		78 - 122					05/30/25 02:04	1
Dibromofluoromethane (Surr)	114		73 - 120					05/30/25 02:04	1

Client Sample Results

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

Job ID: 240-225264-1

Client Sample ID: MW-122_052025

Lab Sample ID: 240-225264-6

Date Collected: 05/20/25 14:50

Matrix: Water

Date Received: 05/24/25 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	1.1	J	2.0	0.86	ug/L			05/30/25 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		68 - 127					05/30/25 16:36	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			05/30/25 02:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/30/25 02:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 02:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/30/25 02:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 02:33	1
Vinyl chloride	2.7		1.0	0.45	ug/L			05/30/25 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		62 - 137					05/30/25 02:33	1
4-Bromofluorobenzene (Surr)	89		56 - 136					05/30/25 02:33	1
Toluene-d8 (Surr)	106		78 - 122					05/30/25 02:33	1
Dibromofluoromethane (Surr)	118		73 - 120					05/30/25 02:33	1

Surrogate Summary

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

Job ID: 240-225264-1

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)
240-225264-1	TRIP BLANK_75	116	90	104	114
240-225264-2	MW-44_052025	112	88	102	106
240-225264-3	PW-16-01_052025	111	89	104	108
240-225264-3	PW-16-01_052025	110	89	102	103
240-225264-4	MW-57_052025	119	91	106	116
240-225264-5	MW-53_052025	115	86	103	114
240-225264-6	MW-122_052025	121	89	106	118
240-225270-B-5 MS	Matrix Spike	104	101	101	105
240-225270-B-5 MSD	Matrix Spike Duplicate	101	101	101	102
240-225389-C-6 MS	Matrix Spike	99	98	103	98
240-225389-C-6 MSD	Matrix Spike Duplicate	101	102	105	101
240-225534-B-39 MS	Matrix Spike	102	104	108	101
240-225534-B-39 MSD	Matrix Spike Duplicate	103	103	106	101
480-229505-E-4 MS	Matrix Spike	98	101	103	100
480-229505-E-4 MSD	Matrix Spike Duplicate	96	100	103	98
LCS 240-657746/5	Lab Control Sample	97	99	103	100
LCS 240-657871/2	Lab Control Sample	102	103	106	105
LCS 240-658113/5	Lab Control Sample	100	99	103	100
LCS 240-658311/5	Lab Control Sample	99	101	105	100
LCSD 240-657871/3	Lab Control Sample Dup	101	101	104	103
MB 240-657746/10	Method Blank	115	91	105	111
MB 240-657871/6	Method Blank	110	84	100	109
MB 240-658113/10	Method Blank	108	87	102	105
MB 240-658311/10	Method Blank	116	89	104	110
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)			
240-225264-2	MW-44_052025	88			
240-225264-3	PW-16-01_052025	92			
240-225264-4	MW-57_052025	88			
240-225264-5	MW-53_052025	87			
240-225264-6	MW-122_052025	89			
240-225270-E-4 MS	Matrix Spike	89			
240-225270-E-4 MSD	Matrix Spike Duplicate	87			
LCS 240-658002/4	Lab Control Sample	86			
MB 240-658002/6	Method Blank	86			
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					

QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: MB 240-657746/10

Matrix: Water

Analysis Batch: 657746

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			05/29/25 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/29/25 12:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/29/25 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/29/25 12:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/29/25 12:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/29/25 12:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		62 - 137		05/29/25 12:33	1
4-Bromofluorobenzene (Surr)	91		56 - 136		05/29/25 12:33	1
Toluene-d8 (Surr)	105		78 - 122		05/29/25 12:33	1
Dibromofluoromethane (Surr)	111		73 - 120		05/29/25 12:33	1

Lab Sample ID: LCS 240-657746/5

Matrix: Water

Analysis Batch: 657746

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	20.7		ug/L		103	63 - 134
cis-1,2-Dichloroethene	20.0	19.7		ug/L		98	77 - 123
Tetrachloroethene	20.0	19.8		ug/L		99	76 - 123
trans-1,2-Dichloroethene	20.0	20.1		ug/L		101	75 - 124
Trichloroethene	20.0	18.1		ug/L		91	70 - 122
Vinyl chloride	20.0	17.2		ug/L		86	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	99		56 - 136
Toluene-d8 (Surr)	103		78 - 122
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: 480-229505-E-4 MS

Matrix: Water

Analysis Batch: 657746

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	110	J	4000	3670		ug/L		89	56 - 135
cis-1,2-Dichloroethene	12000		4000	15500		ug/L		79	66 - 128
Tetrachloroethene	4400		4000	8050		ug/L		92	62 - 131
trans-1,2-Dichloroethene	170	J	4000	4010		ug/L		96	56 - 136
Trichloroethene	7800		4000	10900		ug/L		78	61 - 124
Vinyl chloride	1000		4000	4100		ug/L		77	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		62 - 137
4-Bromofluorobenzene (Surr)	101		56 - 136
Toluene-d8 (Surr)	103		78 - 122

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: 480-229505-E-4 MS

Matrix: Water

Analysis Batch: 657746

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: 480-229505-E-4 MSD

Matrix: Water

Analysis Batch: 657746

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	110	J	4000	3770		ug/L		91	56 - 135	3	26
cis-1,2-Dichloroethene	12000		4000	15600		ug/L		82	66 - 128	1	14
Tetrachloroethene	4400		4000	7980		ug/L		90	62 - 131	1	20
trans-1,2-Dichloroethene	170	J	4000	4050		ug/L		97	56 - 136	1	15
Trichloroethene	7800		4000	10900		ug/L		78	61 - 124	0	15
Vinyl chloride	1000		4000	4160		ug/L		79	43 - 157	1	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		62 - 137
4-Bromofluorobenzene (Surr)	100		56 - 136
Toluene-d8 (Surr)	103		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

Lab Sample ID: MB 240-657871/6

Matrix: Water

Analysis Batch: 657871

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			05/30/25 00:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/30/25 00:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 00:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/30/25 00:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/30/25 00:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/30/25 00:22	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		62 - 137		05/30/25 00:22	1
4-Bromofluorobenzene (Surr)	84		56 - 136		05/30/25 00:22	1
Toluene-d8 (Surr)	100		78 - 122		05/30/25 00:22	1
Dibromofluoromethane (Surr)	109		73 - 120		05/30/25 00:22	1

Lab Sample ID: LCS 240-657871/2

Matrix: Water

Analysis Batch: 657871

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	18.5		ug/L		93	63 - 134
cis-1,2-Dichloroethene	20.0	19.5		ug/L		98	77 - 123
Tetrachloroethene	20.0	17.7		ug/L		88	76 - 123
trans-1,2-Dichloroethene	20.0	19.5		ug/L		98	75 - 124
Trichloroethene	20.0	18.6		ug/L		93	70 - 122

Eurofins Cleveland

QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: LCS 240-657871/2

Matrix: Water

Analysis Batch: 657871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	16.2		ug/L		81	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		62 - 137
4-Bromofluorobenzene (Surr)	103		56 - 136
Toluene-d8 (Surr)	106		78 - 122
Dibromofluoromethane (Surr)	105		73 - 120

Lab Sample ID: LCSD 240-657871/3

Matrix: Water

Analysis Batch: 657871

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	18.6		ug/L		93	63 - 134	0	35
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	77 - 123	1	35
Tetrachloroethene	20.0	17.9		ug/L		90	76 - 123	1	35
trans-1,2-Dichloroethene	20.0	19.1		ug/L		95	75 - 124	2	35
Trichloroethene	20.0	17.9		ug/L		90	70 - 122	4	35
Vinyl chloride	20.0	16.0		ug/L		80	60 - 144	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		62 - 137
4-Bromofluorobenzene (Surr)	101		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	103		73 - 120

Lab Sample ID: 240-225270-B-5 MS

Matrix: Water

Analysis Batch: 657871

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	17.7		ug/L		89	56 - 135
cis-1,2-Dichloroethene	1.0	U	20.0	18.3		ug/L		92	66 - 128
Tetrachloroethene	1.0	U	20.0	17.5		ug/L		88	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	17.6		ug/L		88	56 - 136
Trichloroethene	1.0	U	20.0	17.2		ug/L		86	61 - 124
Vinyl chloride	1.0	U	20.0	14.8		ug/L		74	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		62 - 137
4-Bromofluorobenzene (Surr)	101		56 - 136
Toluene-d8 (Surr)	101		78 - 122
Dibromofluoromethane (Surr)	105		73 - 120

QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: 240-225270-B-5 MSD

Matrix: Water

Analysis Batch: 657871

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	18.1		ug/L		91	56 - 135	2	26
cis-1,2-Dichloroethene	1.0	U	20.0	18.4		ug/L		92	66 - 128	1	14
Tetrachloroethene	1.0	U	20.0	18.0		ug/L		90	62 - 131	3	20
trans-1,2-Dichloroethene	1.0	U	20.0	18.0		ug/L		90	56 - 136	2	15
Trichloroethene	1.0	U	20.0	17.8		ug/L		89	61 - 124	4	15
Vinyl chloride	1.0	U	20.0	14.7		ug/L		74	43 - 157	0	24

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

Lab Sample ID: MB 240-658113/10

Matrix: Water

Analysis Batch: 658113

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			06/02/25 11:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/02/25 11:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/02/25 11:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/02/25 11:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/02/25 11:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/02/25 11:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		62 - 137		06/02/25 11:05	1
4-Bromofluorobenzene (Surr)	87		56 - 136		06/02/25 11:05	1
Toluene-d8 (Surr)	102		78 - 122		06/02/25 11:05	1
Dibromofluoromethane (Surr)	105		73 - 120		06/02/25 11:05	1

Lab Sample ID: LCS 240-658113/5

Matrix: Water

Analysis Batch: 658113

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	19.8		ug/L		99	63 - 134
cis-1,2-Dichloroethene	20.0	19.7		ug/L		99	77 - 123
Tetrachloroethene	20.0	19.1		ug/L		96	76 - 123
trans-1,2-Dichloroethene	20.0	19.5		ug/L		98	75 - 124
Trichloroethene	20.0	18.5		ug/L		93	70 - 122
Vinyl chloride	20.0	15.3		ug/L		77	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	99		56 - 136
Toluene-d8 (Surr)	103		78 - 122

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QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: LCS 240-658113/5

Matrix: Water

Analysis Batch: 658113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: 240-225389-C-6 MS

Matrix: Water

Analysis Batch: 658113

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	250	U	5000	4480		ug/L		90	56 - 135
cis-1,2-Dichloroethene	3800		5000	8610		ug/L		96	66 - 128
Tetrachloroethene	250	U	5000	4700		ug/L		94	62 - 131
trans-1,2-Dichloroethene	250	U	5000	4710		ug/L		94	56 - 136
Trichloroethene	250	U	5000	4350		ug/L		87	61 - 124
Vinyl chloride	170	J	5000	3640		ug/L		69	43 - 157

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	103		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

Lab Sample ID: 240-225389-C-6 MSD

Matrix: Water

Analysis Batch: 658113

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	250	U	5000	4620		ug/L		92	56 - 135	3	26
cis-1,2-Dichloroethene	3800		5000	8810		ug/L		100	66 - 128	2	14
Tetrachloroethene	250	U	5000	4730		ug/L		95	62 - 131	1	20
trans-1,2-Dichloroethene	250	U	5000	4840		ug/L		97	56 - 136	3	15
Trichloroethene	250	U	5000	4480		ug/L		90	61 - 124	3	15
Vinyl chloride	170	J	5000	3790		ug/L		73	43 - 157	4	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		62 - 137
4-Bromofluorobenzene (Surr)	102		56 - 136
Toluene-d8 (Surr)	105		78 - 122
Dibromofluoromethane (Surr)	101		73 - 120

Lab Sample ID: MB 240-658311/10

Matrix: Water

Analysis Batch: 658311

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			06/03/25 12:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/03/25 12:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/03/25 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/03/25 12:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/03/25 12:04	1

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QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: MB 240-658311/10

Matrix: Water

Analysis Batch: 658311

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/03/25 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		62 - 137		06/03/25 12:04	1
4-Bromofluorobenzene (Surr)	89		56 - 136		06/03/25 12:04	1
Toluene-d8 (Surr)	104		78 - 122		06/03/25 12:04	1
Dibromofluoromethane (Surr)	110		73 - 120		06/03/25 12:04	1

Lab Sample ID: LCS 240-658311/5

Matrix: Water

Analysis Batch: 658311

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	20.5		ug/L		102	63 - 134
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	77 - 123
Tetrachloroethene	20.0	21.0		ug/L		105	76 - 123
trans-1,2-Dichloroethene	20.0	20.7		ug/L		104	75 - 124
Trichloroethene	20.0	19.2		ug/L		96	70 - 122
Vinyl chloride	20.0	15.3		ug/L		77	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		62 - 137
4-Bromofluorobenzene (Surr)	101		56 - 136
Toluene-d8 (Surr)	105		78 - 122
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: 240-225534-B-39 MS

Matrix: Water

Analysis Batch: 658311

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
cis-1,2-Dichloroethene	1.0	U	20.0	18.0		ug/L		90	66 - 128
trans-1,2-Dichloroethene	1.0	U	20.0	17.9		ug/L		90	56 - 136
Trichloroethene	11		20.0	26.2		ug/L		76	61 - 124
Vinyl chloride	1.0	U	20.0	13.9		ug/L		70	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		62 - 137
4-Bromofluorobenzene (Surr)	104		56 - 136
Toluene-d8 (Surr)	108		78 - 122
Dibromofluoromethane (Surr)	101		73 - 120

Lab Sample ID: 240-225534-B-39 MSD

Matrix: Water

Analysis Batch: 658311

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
cis-1,2-Dichloroethene	1.0	U	20.0	18.7		ug/L		93	66 - 128	4	14

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QC Sample Results

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

Job ID: 240-225264-1

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

Lab Sample ID: 240-225534-B-39 MSD

Matrix: Water

Analysis Batch: 658311

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
trans-1,2-Dichloroethene	1.0	U	20.0	18.6		ug/L		93	56 - 136	4	15
Trichloroethene	11		20.0	27.1		ug/L		80	61 - 124	3	15
Vinyl chloride	1.0	U	20.0	13.7		ug/L		69	43 - 157	1	24
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	103		62 - 137								
4-Bromofluorobenzene (Surr)	103		56 - 136								
Toluene-d8 (Surr)	106		78 - 122								
Dibromofluoromethane (Surr)	101		73 - 120								

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

Lab Sample ID: MB 240-658002/6

Matrix: Water

Analysis Batch: 658002

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			05/30/25 12:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		68 - 127					05/30/25 12:41	1

Lab Sample ID: LCS 240-658002/4

Matrix: Water

Analysis Batch: 658002

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	8.43		ug/L		84	75 - 121		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	86		68 - 127						

Lab Sample ID: 240-225270-E-4 MS

Matrix: Water

Analysis Batch: 658002

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	9.28		ug/L		93	20 - 180		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	89		68 - 127								

Lab Sample ID: 240-225270-E-4 MSD

Matrix: Water

Analysis Batch: 658002

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	8.87		ug/L		89	20 - 180	5	20

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QC Sample Results

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

Job ID: 240-225264-1

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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		68 - 127

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

QC Association Summary

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

Job ID: 240-225264-1

GC/MS VOA

Analysis Batch: 657746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225264-1	TRIP BLANK_75	Total/NA	Water	8260D	
MB 240-657746/10	Method Blank	Total/NA	Water	8260D	
LCS 240-657746/5	Lab Control Sample	Total/NA	Water	8260D	
480-229505-E-4 MS	Matrix Spike	Total/NA	Water	8260D	
480-229505-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 657871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225264-2	MW-44_052025	Total/NA	Water	8260D	
240-225264-3	PW-16-01_052025	Total/NA	Water	8260D	
240-225264-5	MW-53_052025	Total/NA	Water	8260D	
240-225264-6	MW-122_052025	Total/NA	Water	8260D	
MB 240-657871/6	Method Blank	Total/NA	Water	8260D	
LCS 240-657871/2	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-657871/3	Lab Control Sample Dup	Total/NA	Water	8260D	
240-225270-B-5 MS	Matrix Spike	Total/NA	Water	8260D	
240-225270-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 658002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225264-2	MW-44_052025	Total/NA	Water	8260D SIM	
240-225264-3	PW-16-01_052025	Total/NA	Water	8260D SIM	
240-225264-4	MW-57_052025	Total/NA	Water	8260D SIM	
240-225264-5	MW-53_052025	Total/NA	Water	8260D SIM	
240-225264-6	MW-122_052025	Total/NA	Water	8260D SIM	
MB 240-658002/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-658002/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-225270-E-4 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-225270-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 658113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225264-4	MW-57_052025	Total/NA	Water	8260D	
MB 240-658113/10	Method Blank	Total/NA	Water	8260D	
LCS 240-658113/5	Lab Control Sample	Total/NA	Water	8260D	
240-225389-C-6 MS	Matrix Spike	Total/NA	Water	8260D	
240-225389-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 658311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225264-3	PW-16-01_052025	Total/NA	Water	8260D	
MB 240-658311/10	Method Blank	Total/NA	Water	8260D	
LCS 240-658311/5	Lab Control Sample	Total/NA	Water	8260D	
240-225534-B-39 MS	Matrix Spike	Total/NA	Water	8260D	
240-225534-B-39 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Eurofins Cleveland

Lab Chronicle

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

Job ID: 240-225264-1

Client Sample ID: TRIP BLANK_75

Lab Sample ID: 240-225264-1

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	657746	AJS	EET CLE	05/29/25 18:07

Client Sample ID: MW-44_052025

Lab Sample ID: 240-225264-2

Date Collected: 05/20/25 09:45

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	657871	AJS	EET CLE	05/30/25 00:46
Total/NA	Analysis	8260D SIM		1	658002	R5XG	EET CLE	05/30/25 15:02

Client Sample ID: PW-16-01_052025

Lab Sample ID: 240-225264-3

Date Collected: 05/20/25 10:55

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	657871	AJS	EET CLE	05/30/25 01:11
Total/NA	Analysis	8260D		20	658311	AJS	EET CLE	06/03/25 17:32
Total/NA	Analysis	8260D SIM		1	658002	R5XG	EET CLE	05/30/25 15:25

Client Sample ID: MW-57_052025

Lab Sample ID: 240-225264-4

Date Collected: 05/20/25 12:30

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	658113	AJS	EET CLE	06/02/25 18:04
Total/NA	Analysis	8260D SIM		1	658002	R5XG	EET CLE	05/30/25 15:49

Client Sample ID: MW-53_052025

Lab Sample ID: 240-225264-5

Date Collected: 05/20/25 13:50

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	657871	AJS	EET CLE	05/30/25 02:04
Total/NA	Analysis	8260D SIM		1	658002	R5XG	EET CLE	05/30/25 16:12

Client Sample ID: MW-122_052025

Lab Sample ID: 240-225264-6

Date Collected: 05/20/25 14:50

Matrix: Water

Date Received: 05/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	657871	AJS	EET CLE	05/30/25 02:33
Total/NA	Analysis	8260D SIM		1	658002	R5XG	EET CLE	05/30/25 16:36

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: 240-225264-1

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
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	07-03-25
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	08-31-25
Texas	NELAP	T104704517-22-19	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	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

7/8

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MICHIGAN
190

Eurofins - Cleveland Sample Receipt Form/Narrative

Barberton Facility

Client Ford Site Name _____ Login # _____

Cooler Received on 5-24-25 Opened on 5-24-25 Cooler unpacked by JE

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 None Other _____

Packing material used: Bubble Wrap None Other _____

COOLANT Water Blue Ice Dry Ice Water None Other _____

1 Cooler temperature upon receipt 40.5 °C ☒ See Multiple Cooler Form

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____ °C Corrected Cooler Temp. _____ °C

-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

13 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 VOA's 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 # NA Yes No NA

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 _____

6/4/2025

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	02	07	Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	03	08	Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Well Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

Temperature readings							
Client Sample ID	Lab ID	Container Type	Container pH	Preservation Temp	Preservation Added	Preservation Lot Number	
TRIP BLANK_75	240-225264-A-1	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-A-2	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-B-2	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-C-2	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-D-2	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-E-2	Voa Vial 40ml - Hydrochloric Acid					
MW-44_052025	240-225264-G-2	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-A-3	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-B-3	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-C-3	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-D-3	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-E-3	Voa Vial 40ml - Hydrochloric Acid					
PW-16-01_052025	240-225264-F-3	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-A-4	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-B-4	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-C-4	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-D-4	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-E-4	Voa Vial 40ml - Hydrochloric Acid					
MW-57_052025	240-225264-F-4	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-A-5	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-B-5	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-C-5	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-D-5	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-E-5	Voa Vial 40ml - Hydrochloric Acid					
MW-53_052025	240-225264-F-5	Voa Vial 40ml - Hydrochloric Acid					
MW-122_052025	240-225264-A-6	Voa Vial 40ml - Hydrochloric Acid					
MW-122_052025	240-225264-B-6	Voa Vial 40ml - Hydrochloric Acid					
MW-122_052025	240-225264-C-6	Voa Vial 40ml - Hydrochloric Acid					
MW-122_052025	240-225264-D-6	Voa Vial 40ml - Hydrochloric Acid					
MW-122_052025	240-225264-E-6	Voa Vial 40ml Hydrochloric Acid					
MW-122_052025	240-225264-F-6	Voa Vial 40ml - Hydrochloric Acid					

DATA VERIFICATION REPORT



June 04, 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)

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 225264-1

Sample date: 2025-05-20

Report received by CADENA: 2025-06-04

Initial Data Verification completed by CADENA: 2025-06-04

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.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD 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: 225264-1

		Sample Name: TRIP BLANK_75				MW-44_052025				PW-16-01_052025				MW-57_052025				MW-53_052025				MW-122_052025				
		Lab Sample ID: 2402252641				2402252642				2402252643				2402252644				2402252645				2402252646				
		Sample Date: 5/20/2025				5/20/2025				5/20/2025				5/20/2025				5/20/2025				5/20/2025				
Analyte		Cas No.	Report		Valid	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	1.0	ug/l	---
cis-1,2-Dichloroethene		156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	50	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	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	---	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	---	3.3	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	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride		75-01-4	ND	1.0	ug/l	---	5.4	1.0	ug/l	---	890	20	ug/l	---	0.71	1.0	ug/l	J	0.74	1.0	ug/l	J	2.7	1.0	ug/l	---
OSW-8260DSIM																										
1,4-Dioxane		123-91-1					4.0	2.0	ug/l	---	1.0	2.0	ug/l	J	1.3	2.0	ug/l	J	1.2	2.0	ug/l	J	1.1	2.0	ug/l	J