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PREPARED FOR

**ANALYTICAL REPORT** 

Attn: Ms. Megan Meckley Arcadis US Inc. 28550 Cabot Drive Suite 500 Novi, Michigan 48377 Generated 5/19/2025 6:51:27 AM

**JOB DESCRIPTION** 

Ford LTP

**JOB NUMBER** 

240-224184-1

Eurofins Cleveland 180 S. Van Buren Avenue Barberton OH 44203



# **Eurofins Cleveland**

### **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Generated 5/19/2025 6:51:27 AM

Authorized for release by Michael DelMonico, Project Manager I Michael.DelMonico@et.eurofinsus.com (330)966-9783 Client: Arcadis US Inc. Project/Site: Ford LTP

Laboratory Job ID: 240-224184-1

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### **Definitions/Glossary**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

### **Qualifiers**

### **GC/MS VOA**

Qualifier **Qualifier Description** 

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)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML 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) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

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### **Case Narrative**

Client: Arcadis US Inc. Project: Ford LTP

Job ID: 240-224184-1 Eurofins Cleveland

Job Narrative 240-224184-1

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 5/10/2025 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 0.6°C and 1.0°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: 240-224184-1

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

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# **Sample Summary**

Client: Arcadis US Inc.

Project/Site: Ford LTP

Job ID: 240-224184-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-224184-1	TRIP BLANK_125	Water	05/08/25 00:00	05/10/25 08:00
240-224184-2	MW-149S_050825	Water	05/08/25 12:40	05/10/25 08:00

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# **Detection Summary**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

No Detections.

Client Sample ID: TRIP BLANK\_125

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Vinyl chloride	1.1	1.0	0.45 ug/L	1	8260D	Total/NA

1

Lab Sample ID: 240-224184-1

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# **Client Sample Results**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK\_125

Lab Sample ID: 240-224184-1 Date Collected: 05/08/25 00:00

Matrix: Water

Date Received: 05/10/25 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/25 12:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/25 12:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 12:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/25 12:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 12:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/25 12:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		62 - 137			_		05/16/25 12:35	1
4-Bromofluorobenzene (Surr)	83		56 <sub>-</sub> 136					05/16/25 12:35	1
Toluene-d8 (Surr)	103		78 - 122					05/16/25 12:35	1
Dibromofluoromethane (Surr)	90		73 - 120					05/16/25 12:35	1

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# **Client Sample Results**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

**Client Sample ID: MW-149S\_050825** 

Date Collected: 05/08/25 12:40
Date Received: 05/10/25 08:00

Matrix: Water

Lab Sample ID: 240-224184-2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/14/25 22:06	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	76		68 - 127					05/14/25 22:06	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/25 16:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/25 16:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 16:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/25 16:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 16:31	1
Vinyl chloride	1.1		1.0	0.45	ug/L			05/16/25 16:31	1
Surrogate	%Recovery	Qualifier	Limits			_	Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86	62 - 137		05/16/25 16:31	1
4-Bromofluorobenzene (Surr)	82	56 - 136		05/16/25 16:31	1
Toluene-d8 (Surr)	101	78 - 122		05/16/25 16:31	1
Dibromofluoromethane (Surr)	91	73 - 120		05/16/25 16:31	1

# **Surrogate Summary**

Client: Arcadis US Inc. Job ID: 240-224184-1 Project/Site: Ford LTP

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

Matrix: Water Prep Type: Total/NA

				Percent Sur	rrogate Reco
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-224184-1	TRIP BLANK_125	86	83	103	90
240-224184-2	MW-149S_050825	86	82	101	91
240-224204-B-3 MS	Matrix Spike	85	89	105	92
240-224204-B-3 MSD	Matrix Spike Duplicate	85	88	104	93
LCS 240-656261/5	Lab Control Sample	82	88	103	92
MB 240-656261/9	Method Blank	85	84	104	89

### 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)	
240-224135-E-2 MS	Matrix Spike	78	
240-224135-E-2 MSD	Matrix Spike Duplicate	77	
240-224184-2	MW-149S_050825	76	
LCS 240-656016/5	Lab Control Sample	78	
MB 240-656016/7	Method Blank	78	
Surrogate Legend			
DCA = 1,2-Dichloroetha	ne-d4 (Surr)		

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Client: Arcadis US Inc. Job ID: 240-224184-1

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

Lab Sample ID: MB 240-656261/9

**Matrix: Water** 

Project/Site: Ford LTP

Analysis Batch: 656261

Client	Sample	ID:	Method	Blank
	Dr	on '	Type: To	tal/NA

rep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/25 10:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/25 10:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 10:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/25 10:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 10:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/25 10:37	1

MB MB %Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 62 - 137 05/16/25 10:37 85 4-Bromofluorobenzene (Surr) 84 56 - 136 05/16/25 10:37 Toluene-d8 (Surr) 104 78 - 122 05/16/25 10:37 Dibromofluoromethane (Surr) 89 73 - 120 05/16/25 10:37

Lab Sample ID: LCS 240-656261/5

**Matrix: Water** 

Analysis Batch: 656261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LUS	LUS				/orec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	25.0	23.1		ug/L		93	63 - 134	
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	77 - 123	
Tetrachloroethene	25.0	25.9		ug/L		103	76 - 123	
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	75 - 124	
Trichloroethene	25.0	24.7		ug/L		99	70 - 122	
Vinyl chloride	25.0	23.9		ug/L		96	60 - 144	

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 82 62 - 137 4-Bromofluorobenzene (Surr) 88 56 - 136 Toluene-d8 (Surr) 103 78 - 122 73 - 120 Dibromofluoromethane (Surr) 92

Analysis Batch: 656261

-	
Lab Sample ID: 240-224204-B-3 MS	Client Sample ID: Matrix Spike
Matrix: Water	Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	80	U	2000	1790		ug/L		89	56 - 135	
cis-1,2-Dichloroethene	780		2000	2590		ug/L		91	66 - 128	
Tetrachloroethene	80	U	2000	1930		ug/L		97	62 - 131	
trans-1,2-Dichloroethene	80	U	2000	1820		ug/L		91	56 - 136	
Trichloroethene	3900		2000	5550	E	ug/L		82	61 - 124	
Vinyl chloride	92		2000	2010		ug/L		96	43 - 157	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		62 - 137
4-Bromofluorobenzene (Surr)	89		56 - 136
Toluene-d8 (Surr)	105		78 - 122

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5/19/2025

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

Job ID: 240-224184-1

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

Lab Sample ID: 240-224204-B-3 MS

Lab Sample ID: 240-224204-B-3 MSD

**Matrix: Water** 

Analysis Batch: 656261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

MS MS Surrogate %Recovery Qualifier

Limits Dibromofluoromethane (Surr) 92 73 - 120

Client Sample ID: Matrix Spike Duplicate

**Matrix: Water** 

Analysis Batch: 656261

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
1,1-Dichloroethene	80	U	2000	1770		ug/L		88	56 - 135	1	26	
cis-1,2-Dichloroethene	780		2000	2600		ug/L		91	66 - 128	0	14	
Tetrachloroethene	80	U	2000	1860		ug/L		93	62 - 131	4	20	
trans-1,2-Dichloroethene	80	U	2000	1820		ug/L		91	56 - 136	0	15	
Trichloroethene	3900		2000	5570	E	ug/L		83	61 - 124	0	15	
Vinyl chloride	92		2000	1930		ug/L		92	43 - 157	4	24	

MSD MSD

MR MR

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		62 - 137
4-Bromofluorobenzene (Surr)	88		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	93		73 - 120

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

Lab Sample ID: MB 240-656016/7

**Matrix: Water** 

Analysis Batch: 656016

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,4-Dioxane 2.0 U 2.0 0.86 ug/L 05/14/25 14:40 MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 78 68 - 127 05/14/25 14:40

Lab Sample ID: LCS 240-656016/5

**Matrix: Water** Prep Type: Total/NA Analysis Batch: 656016 Spike LCS LCS %Rec

Analyte Added Result Qualifier Unit %Rec Limits 1,4-Dioxane 10.0 8.25 ug/L 82 75 - 121

LCS LCS

%Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 68 - 127 78

Lab Sample ID: 240-224135-E-2 MS

**Matrix: Water** 

Analysis Batch: 656016

Analysis Balcii. 656016	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,4-Dioxane	2.0	U	10.0	8.70		ug/L		87	20 - 180	

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Prep Type: Total/NA

# **QC Sample Results**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

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

Surrogate%RecoveryQualifierLimits1,2-Dichloroethane-d4 (Surr)7868 - 127			MS	MS	
1,2-Dichloroethane-d4 (Surr) 78 68 - 127		Surrogate	%Recovery	Qualifier	Limits
	L	1,2-Dichloroethane-d4 (Surr)	78		68 - 127

1,2-Dichloroethane-d4 (Surr)	78	68 - 127	
Lab Sample ID: 240-224135-E-2 MSD Matrix: Water			Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA
Matrix: Water			Prep Type. Total/NA

Analysis Batch: 656016											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	2.0	U	10.0	9.63		ug/L		96	20 - 180	10	20

1,1 Blokano	2.0	Ü	10.0	0.00	ug/ =
	MSD	MSD			
Surrogate	%Recovery	Qualifier	Limits		
1,2-Dichloroethane-d4 (Surr)	77		68 - 127		

# **QC Association Summary**

Client: Arcadis US Inc.

Project/Site: Ford LTP

Job ID: 240-224184-1

### **GC/MS VOA**

### Analysis Batch: 656016

Lab Sample ID 240-224184-2	Client Sample ID MW-1498_050825	Prep Type Total/NA	Matrix Water	Method 8260D SIM	Prep Batch
MB 240-656016/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-656016/5	Lab Control Sample	Total/NA	Water	8260D SIM	
240-224135-E-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-224135-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

### Analysis Batch: 656261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224184-1	TRIP BLANK_125	Total/NA	Water	8260D	
240-224184-2	MW-149S_050825	Total/NA	Water	8260D	
MB 240-656261/9	Method Blank	Total/NA	Water	8260D	
LCS 240-656261/5	Lab Control Sample	Total/NA	Water	8260D	
240-224204-B-3 MS	Matrix Spike	Total/NA	Water	8260D	
240-224204-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

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### **Lab Chronicle**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK\_125

Lab Sample ID: 240-224184-1 Date Collected: 05/08/25 00:00

Matrix: Water

Date Received: 05/10/25 08:00 Dilution Batch Batch Batch

Prepared Prep Type Туре Method Run Factor **Number Analyst** Lab or Analyzed Total/NA 8260D 656261 MS EET CLE 05/16/25 12:35 Analysis

Client Sample ID: MW-149S\_050825 Lab Sample ID: 240-224184-2

Date Collected: 05/08/25 12:40 **Matrix: Water** 

Date Received: 05/10/25 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	656261	MS	EET CLE	05/16/25 16:31
Total/NA	Analysis	8260D SIM		1	656016	R5XG	EET CLE	05/14/25 22:06

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: 240-224184-1

### **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
lowa	State	421	06-01-25
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

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### Chain of Custody Record

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TestAmerica

Client Contact	Regula	tory program:		┌ DW		□ NP	DES	٢	RCI	ta.	┌ Ot	her								
Company Name: Arcadis	Client Project	Manager: Mega	n Meckle	v	19	Site Co	ntact:	Saman	tha Sz	aichler			Lah C	ontact	· Mike	DelM	nnico			TestAmerica Laboratories, Inc
Address: 28550 Cabot Drive, Suite 500										,										
City/State/Zip: Novi, MI, 48377	Telephone: 248	-994-2240			17	Celepho	one: 24	18-994-	2240				Telepi	hone: 3	30-49	7-9396				1 of 1 COCs
City Country app. 17071, 1811, 40077	Email: megan.	meckley@arcac	lis.com			Am	ysis	luman	omd T	me:						An	llyses			For lab use only
Phone: 248-994-2240	Sumpler Nume	. 1 \0				TAT if d	ifferent f	from belov	w											Walk-in client
Project Name: Ford LTP	Sampler Name	Noch	Dov	mde		10 d		☐ 3 1 ☐ 2 1	weeks											
Project Number: 30251157.401.04	Method of Ship		V			10 0	ау	F 15	week		2 9			۵			¥			Lab sampling
PO # US3460023914	Shipping/Tracking No:			2 44 75							Trans-1,2-DCE 8260D PCE 8260D TOE 8260D Vinyl Chloride 8280D 1,4-Dioxane 8280D SIM					Job/SDG No:				
				Matrix		Ce	mtaine	rs & Pro	servati	res	E S	8260D	SE 8	-DC	9	9	oride			
Sample Identification	Sample Date	Sample Time	Air	Sediment	Other:	HN03	HCI	NaOH ZaAU	Vapres	Other:	Filtered Sample (Y / N) Composite=C / Grab=G	1,1-DCE	cis-1,2-DCE 8260D	Trans-1,2-DCE	PCE 8260D	TCE 8260D	Vinyl Chit			Sample Specific Notes / Special Instructions:
TRIP BLANK_ 12-5			1				1				NG				$\neg$	Ŧ	X			1 Trip Blank
MW-1495_650825	05/08/25	12:40	6				6				NG	1	メ	X	×	×	۷>	4		3 VOAs for 8260D 3 VOAs for 8260D SIM
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						+	$\forall$				+				$\dashv$	+	$\top$		+	
Possible Hazard Identification  Non-Hazard lammable sin Irrit	ant Poise	ın B	Jnknown		$\dashv$	Samp		posal (		ay be ass			es are					th) Months		
		even s	_				Ketui	m to Ch	ent	Dis	sposai E	sy Lab	-	All	hive F	or		Months		
Submit all results through Cadena at jtomalia@cadenac.evel IV Reporting requested.			٠(.																	
Relinquished by: Downte	Company:	13	Date 05	Tob [	75 l	 5ン	2	Receive	d by:	col	کے لے	foro	حرد	_	C	Compan	y. Toe	lis		Date/Time: 05/08/25 1572
Relinquished by:	Company:	ADIS	Date	Time: /9/2	5	1 0	6	Receive	ed by:	ill		10	Ľ			Compan	y:	EXA		Date/Time:
Relinquished by:	Company:	TA	Date	Time:	~	166	36	Receiv	rd In L	aborator	y by:				C	Compai				Date/Time: 5/00/25 68

VOA Sample Preservation - Date/Time VOAs Frozen.
Sample(s)were further preserved in the laboratory Time preservedPreservative(s) added/Lot number(s)were further preserved in the laboratory
20. SAMPLE PRESERVATION
Sample(s) were received after the recommended holding time had expired.  Sample(s) were received after the recommended holding time had expired.  Sample(s) were received with bubble >6 mm in diameter (Notify PM)
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES
Concerning
Contacted PM Date by via Verbal Voice Mail Other
If yes, Questions 13-17 have been checked at the originating laboratory  13 Were all preserved sample(s) at the correct pH upon receipt?  14 Were VOAs on the COC?  15 Were VOAs on the COC?
11 Sufficient quantity received to perform indicated analyses?  12 Are these work share samples and all listed on the COC?  Yes Que
For each sample, does the COC specify preservatives (YN), # of containers (YN), and said Were correct bottle(s) used for the test(s) indicated?
7 Did all bottles arrive in good condition (Unbroken)?  8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?  9 Very No.
Did custody papers accompany the sample(s)?  Were the custody papers relinquished & signed in the appropriate place?  Washing the passage with collected the samples bleathy identified on the COC?
Shippers' packing slip attached to the cooler(s)?  Yet No.  Yet No.
Were tamper/custody seals on the outside of the cooler(s) signed & dated?  Were the seals on the outside of the cooler(s) signed & dated?  Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?  Where tamper/custody seals in the bottle(s) or bottle kits (LLHg/MeHg)?  Where tamper/custody seals in the cooler(s) is given by the checked for pH by the checked
IR GUN# (CF °C) Observed Cooler Temp. °C Co
sperature upon receipt
rial used. Bubble Wrap Foam Plastic Bag None
Receipt After-hours Drop-off Date/Time Storage Location  Eurofins Cooler # C Foam Box Client Cooler Box Other
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other
25
Barberton Facility Login A Login To Line Company Compa

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4	

Wet Ice Blue Ice Dry Ice Water None			IR GUN#:	Box Other	Client	23
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Wet Ice Blue Ice Dry Ice Water Nane	0.6	01	IR GUN #: 13	Box Other	Client	(F)
Coolant (Circle)	Corrected Temp °C	Observed Temp °C	IR Gun # (Circle)	cription le)	Cooler Description (Circle)	
277 12 12 12 12 12 12 12 12 12 12 12 12 12						

5/10/2025

**Login Container Summary Report** 

	Voa Vial 40ml - Hydrochloric Acid	240-224184-F-2	MW-149S_050825
	Voa Vial 40ml - Hydrochloric Acid	240-224184-D-2 240-224184-E-2	MW-149S_050825
	Voa Vial 40ml - Hydrochloric Acid	240-224184-C-2	MW-149S_050825
	Voa Vial 40ml - Hydrochloric Acid	240-224184-B-2	MW-149S_050825
	Voa Vial 40ml - Hydrochloric Acid	240-224184-A-2	MW-149S_050825
And the control of th	Voa Vial 40ml - Hydrochloric Acid	240-224184-A-I	TRIP BLANK_125
Container Preservation Preservation  pH Temp Added Lot Number	Container Type	<u>Lab ID</u>	Client Sample ID
			Temperature readings.

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## DATA VERIFICATION REPORT



May 19, 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: 224184-1 Sample date: 2025-05-08

Report received by CADENA: 2025-05-19

Initial Data Verification completed by CADENA: 2025-05-19

Number of Samples:2 Sample Matrices:Water Test Categories:GCMS VOC

Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

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

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

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

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

**Project Scientist** 

# **CADENA Valid Qualifiers**

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
В	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.
Е	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: 224184-1

		Sample Name: Lab Sample ID: Sample Date:	TRIP BL/ 240224 5/8/202	- 1841 5			MW-149S_050825 2402241842 5/8/2025			
	Analyte	Cas No.	Result	Report Limit		Valid Qualifier	Docult	Report		Valid Qualifier
	Allatyte	Gas No.	nesuli	Lilling	Uiills	Quatifier	nesutt	Lilling	Ullits	Quanner
GC/MS VOC										
OSW-8260	<u>)D</u>									
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l		ND	1.0	ug/l	
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l		ND	1.0	ug/l	
	Tetrachloroethene	127-18-4	ND	1.0	ug/l		ND	1.0	ug/l	
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l		ND	1.0	ug/l	
	Trichloroethene	79-01-6	ND	1.0	ug/l		ND	1.0	ug/l	
	Vinyl chloride	75-01-4	ND	1.0	ug/l		1.1	1.0	ug/l	
OSW-8260	<u>DDSIM</u>									
	1,4-Dioxane	123-91-1					ND	2.0	ug/l	



# Ford Motor Company – Livonia Transmission Project

# **Data Review**

# Livonia, Michigan

Volatile Organic Compounds (VOC) Analysis

SDG # 240-224184-1

CADENA Verification Report: 2025-05-19

Analyses Performed By: Eurofins Cleveland Barberton, Ohio

Report # 59629R Review Level: Tier III Project: 30251157.401.02

## **SUMMARY**

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-224184-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) include a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample	Parent Sample	Ana	lysis
Sample ID	Labib	Wallix	Collection Date	raieiii Saiiipie	voc	VOC SIM
TRIP BLANK_125	240-224184-1	Water	05/08/2025		Х	
MW-149S_050825	240-224184-2	Water	05/08/2025		Х	X

## **ANALYTICAL DATA PACKAGE DOCUMENTATION**

The table below is the evaluation of the data package completeness.

Items Reviewed	Rep	orted	Perfori Accep		Not Required	
	No	Yes	No	Yes	Required	
Sample receipt condition		X		X		
2. Requested analyses and sample results		X		Х		
Master tracking list		Х		Х		
4. Methods of analysis		Х		Х		
5. Reporting limits		Х		Х		
6. Sample collection date		Х		Х		
7. Laboratory sample received date		Х		Х		
8. Sample preservation verification (as applicable)		Х		Х		
9. Sample preparation/extraction/analysis dates		Х		Х		
10. Fully executed Chain-of-Custody (COC) form		Х		Х		
Narrative summary of Quality Assurance or sample problems provided		Х		Х		
12. Data Package Completeness and Compliance		Х		Х		

#### ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260D and 8260D SIM. Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999), as appropriate.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

### **VOLATILE ORGANIC COMPOUND (VOC) ANALYSES**

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260D/8260D-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

### 2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable, and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

### 3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

### 3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

### 3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

### 4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

### 5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected for samples from this SDG.

### 6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

## 7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

### **DATA VALIDATION CHECKLIST FOR VOCs**

Rep	orted			Not Required	
No	Yes	No	required		
C/MS)					
	Х		Х		
	Х		Х		
	Х		Х		
	Х		Х		
	Х		Х		
	Х		Х		
	Х		Х		
X				Х	
	Х		Х		
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	Х		Х		
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	Х		Х		
	No C/MS)	X X X X X X X X X X X X X X X X X X X	Reported Acce No Yes No  C/MS)  X  X  X  X  X  X  X  X  X  X  X  X  X	No   Yes   No   Yes	

### Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Febin J S

SIGNATURE:

DATE: June 16, 2025

PEER REVIEW: Andrew Korycinski

DATE: June 22, 2025

# NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS



### Chain of Custody Record

6/13

TestAmerica

Client Contact	Regula	tory program:		┌ DW	,	F N	PDES	٢	RCI	IA.	┌ Ot	her						-		
Company Name: Arcadis	Client Project	Manager: Mega	n Meckle	v	-	Site Co	ntact:	Saman	tha Sz	aichler			Lah C	'ontac	· Mike	- DelM	onico			TestAmerica Laboratories, I
Address: 28550 Cabot Drive, Suite 500				, 						Lab Contact: Mike DelMonico Telephone: 330-497-9396					COC No:					
City/State/Zip: Novi, M1, 48377	Telephone: 248	-994-2240													1 of 1 COCs					
City State Supp. (1911, 1937)	Email: megan.	meckley@arcac	dis.com		Analysis Turnaround Time				Analyses					For lab use only						
Phone: 248-994-2240	Sumpler Name	. 1 \0				TATif	different	from belov	w											Walk-in client
Project Name: Ford LTP	Sampler Name	Noch Down & 10 day 2 weeks																		
Project Number: 30251157.401.04	Method of Ship										Lab sampling									
PO # US3460023914	Shipping/Tracl	2 days					260D	E 8260D			92600			Job/SDG No:						
		Matrix		Matrix Containers & Preservatives		8260D	SE 8	-DC	9	8	oride g									
Sample Identification	Sample Date	Sample Time	Air	Sediment	Other:	HN01	HCI	NaOH ZaAU	Vapres	Other:	Filtered Sample (Y/N)	1,1-DCE	cis-1,2-DCE 8260D	Trans-1,2-DCE	PCE 8260D	TCE 8260D	Vinyl Chloride 8260D			Sample Specific Notes / Special Instructions:
TRIP BLANK_ 125			1				1				NG			Х	$\neg$		X			1 Trip Blank
MW-1495_650825	05/05/25	12:40	6				6				NG	1	又	. 🛪	×	<u> </u>	۷>	4		3 VOAs for 8260D 3 VOAs for 8260D SIM
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	-								+		t				+		+			
						N	0				$\dagger$				$\dashv$		+			KARLER .
						+		05	00	25	+				+	+	+	+H	+	LOSS -
							Н			4	+				+	+	+	+++		240-224184 COC
			$\vdash$	+					+	-		$\vdash$		1	+	$\Rightarrow$	$\downarrow$			240-224104
				+			+				+				$\dashv$		$\top$		+	
Possible Hazard Identification  Non-Hazard   lammable   sin Irri	tant Poisc	on B	Jnknowr			Sam		posal (		ay be as			es are		ed long			ith) Months		
		even "	_					10 0			.pomii E	, 540		7.0					-	
Submit all results through Cadena at jtomalia@cadena evel IV Reporting requested.																				
Relinquisher by: Noah Dounte	Company:	its	Date	108/	25 1	52	2	Receive	by:	col	۽ لے	fore	سرد	_	(	Compar	y. Toe	Jis		Date/Time: 05/08/25 157
Relinquished by:	Company:	ADIS	Date	Time: /2	25	1/ 0	(0	Receive	ed by:	ill		10	Ľ			Compar	y:	AKE		Date/Time:
Relinquished by:	Company:	TA	Date	Time:	75	16	96	Receiv	rd in L	borztor	y by:				(	Compai	Ty:			Date/Time: 5 W 25 6

### **Definitions/Glossary**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

### **Qualifiers**

### **GC/MS VOA**

Qualifier **Qualifier Description** 

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)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML 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) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

**Eurofins Cleveland** 

5/19/2025

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# **Client Sample Results**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK\_125

Lab Sample ID: 240-224184-1 Date Collected: 05/08/25 00:00

Matrix: Water

Date Received: 05/10/25 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/25 12:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/25 12:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 12:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/25 12:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 12:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/25 12:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		62 - 137			-		05/16/25 12:35	1
4-Bromofluorobenzene (Surr)	83		56 <sub>-</sub> 136					05/16/25 12:35	1
Toluene-d8 (Surr)	103		78 - 122					05/16/25 12:35	1
Dibromofluoromethane (Surr)	90		73 - 120					05/16/25 12:35	1

**Eurofins Cleveland** 

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# **Client Sample Results**

Client: Arcadis US Inc. Job ID: 240-224184-1

Project/Site: Ford LTP

**Client Sample ID: MW-149S\_050825** 

Date Collected: 05/08/25 12:40
Date Received: 05/10/25 08:00

Matrix: Water

Lab Sample ID: 240-224184-2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/14/25 22:06	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	76		68 - 127					05/14/25 22:06	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/25 16:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/25 16:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 16:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/25 16:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/25 16:31	1
Vinyl chloride	1.1		1.0	0.45	ug/L			05/16/25 16:31	1
Surrogate	%Recovery	Qualifier	Limits			_	Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86	62 - 137		05/16/25 16:31	1
4-Bromofluorobenzene (Surr)	82	56 - 136		05/16/25 16:31	1
Toluene-d8 (Surr)	101	78 - 122		05/16/25 16:31	1
Dibromofluoromethane (Surr)	91	73 - 120		05/16/25 16:31	1