

# ANALYTICAL REPORT

## PREPARED FOR

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Novi, Michigan 48377

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## JOB DESCRIPTION

Ford LTP

## JOB NUMBER

240-215597-1

# Eurofins Cleveland

## Job Notes

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## Authorization



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# Definitions/Glossary

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

Job ID: 240-215597-1

## 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: 240-215597-1

**Job ID: 240-215597-1**

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## Job Narrative 240-215597-1

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 11/23/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2°C and 5.0°C.

### GC/MS VOA

Method 8260D: No MS/MSD due to reanalysis of parent sample and MS/MSD.

TRIP BLANK\_106 (240-215597-1), MW-195S\_112224 (240-215597-2) and DUP-07 (240-215597-4)

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: 240-215597-1

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: 240-215597-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-215597-1	TRIP BLANK_106	Water	11/22/24 00:00	11/23/24 08:00
240-215597-2	MW-195S_112224	Water	11/22/24 10:42	11/23/24 08:00
240-215597-3	MW-37_112224	Water	11/22/24 12:05	11/23/24 08:00
240-215597-4	DUP-07	Water	11/22/24 00:00	11/23/24 08:00

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

# Detection Summary

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

Job ID: 240-215597-1

## Client Sample ID: TRIP BLANK\_106

Lab Sample ID: 240-215597-1

No Detections.

## Client Sample ID: MW-195S\_112224

Lab Sample ID: 240-215597-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethene	1.5		1.0	0.49	ug/L			1	8260D	Total/NA
cis-1,2-Dichloroethene	140		100	46	ug/L			100	8260D	Total/NA
trans-1,2-Dichloroethene	250		100	51	ug/L			100	8260D	Total/NA
Trichloroethene	3100		100	44	ug/L			100	8260D	Total/NA
Vinyl chloride	3.1		1.0	0.45	ug/L			1	8260D	Total/NA

## Client Sample ID: MW-37\_112224

Lab Sample ID: 240-215597-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	0.47	J	1.0	0.44	ug/L			1	8260D	Total/NA

## Client Sample ID: DUP-07

Lab Sample ID: 240-215597-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethene	1.6		1.0	0.49	ug/L			1	8260D	Total/NA
cis-1,2-Dichloroethene	140		100	46	ug/L			100	8260D	Total/NA
trans-1,2-Dichloroethene	250		100	51	ug/L			100	8260D	Total/NA
Trichloroethene	3200		100	44	ug/L			100	8260D	Total/NA
Vinyl chloride	3.1		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: 240-215597-1

**Client Sample ID: TRIP BLANK\_106**

**Lab Sample ID: 240-215597-1**

Date Collected: 11/22/24 00:00

Matrix: Water

Date Received: 11/23/24 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			12/01/24 14:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/01/24 14:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 14:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/01/24 14:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 14:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/01/24 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 137		12/01/24 14:58	1
4-Bromofluorobenzene (Surr)	85		56 - 136		12/01/24 14:58	1
Toluene-d8 (Surr)	99		78 - 122		12/01/24 14:58	1
Dibromofluoromethane (Surr)	113		73 - 120		12/01/24 14:58	1

# Client Sample Results

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

Job ID: 240-215597-1

**Client Sample ID: MW-195S\_112224**

**Lab Sample ID: 240-215597-2**

Date Collected: 11/22/24 10:42

Matrix: Water

Date Received: 11/23/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/02/24 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		68 - 127					12/02/24 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.5		1.0	0.49	ug/L			12/01/24 15:18	1
cis-1,2-Dichloroethene	140		100	46	ug/L			12/02/24 13:05	100
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 15:18	1
trans-1,2-Dichloroethene	250		100	51	ug/L			12/02/24 13:05	100
Trichloroethene	3100		100	44	ug/L			12/02/24 13:05	100
Vinyl chloride	3.1		1.0	0.45	ug/L			12/01/24 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		62 - 137					12/01/24 15:18	1
1,2-Dichloroethane-d4 (Surr)	116		62 - 137					12/02/24 13:05	100
4-Bromofluorobenzene (Surr)	86		56 - 136					12/01/24 15:18	1
4-Bromofluorobenzene (Surr)	85		56 - 136					12/02/24 13:05	100
Toluene-d8 (Surr)	101		78 - 122					12/01/24 15:18	1
Toluene-d8 (Surr)	97		78 - 122					12/02/24 13:05	100
Dibromofluoromethane (Surr)	112		73 - 120					12/01/24 15:18	1
Dibromofluoromethane (Surr)	105		73 - 120					12/02/24 13:05	100

# Client Sample Results

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

Job ID: 240-215597-1

**Client Sample ID: MW-37\_112224**

**Lab Sample ID: 240-215597-3**

Date Collected: 11/22/24 12:05

Matrix: Water

Date Received: 11/23/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/02/24 17:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	112		68 - 127					12/02/24 17:36	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			12/02/24 13:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/02/24 13:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/02/24 13:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/02/24 13:25	1
<b>Trichloroethene</b>	<b>0.47</b>	<b>J</b>	1.0	0.44	ug/L			12/02/24 13:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/02/24 13:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	113		62 - 137					12/02/24 13:25	1
4-Bromofluorobenzene (Surr)	77		56 - 136					12/02/24 13:25	1
Toluene-d8 (Surr)	89		78 - 122					12/02/24 13:25	1
Dibromofluoromethane (Surr)	103		73 - 120					12/02/24 13:25	1

# Client Sample Results

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

Job ID: 240-215597-1

**Client Sample ID: DUP-07**

**Lab Sample ID: 240-215597-4**

Date Collected: 11/22/24 00:00

Matrix: Water

Date Received: 11/23/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/02/24 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		68 - 127					12/02/24 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.6		1.0	0.49	ug/L			12/01/24 15:58	1
cis-1,2-Dichloroethene	140		100	46	ug/L			12/02/24 13:45	100
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 15:58	1
trans-1,2-Dichloroethene	250		100	51	ug/L			12/02/24 13:45	100
Trichloroethene	3200		100	44	ug/L			12/02/24 13:45	100
Vinyl chloride	3.1		1.0	0.45	ug/L			12/01/24 15:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		62 - 137					12/01/24 15:58	1
1,2-Dichloroethane-d4 (Surr)	116		62 - 137					12/02/24 13:45	100
4-Bromofluorobenzene (Surr)	86		56 - 136					12/01/24 15:58	1
4-Bromofluorobenzene (Surr)	79		56 - 136					12/02/24 13:45	100
Toluene-d8 (Surr)	100		78 - 122					12/01/24 15:58	1
Toluene-d8 (Surr)	91		78 - 122					12/02/24 13:45	100
Dibromofluoromethane (Surr)	114		73 - 120					12/01/24 15:58	1
Dibromofluoromethane (Surr)	106		73 - 120					12/02/24 13:45	100

# Surrogate Summary

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

Job ID: 240-215597-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL	DBFM
		(62-137)	(56-136)	(78-122)	(73-120)
240-215341-C-3 MS	Matrix Spike	104	98	95	96
240-215341-C-3 MSD	Matrix Spike Duplicate	109	97	99	102
240-215597-1	TRIP BLANK_106	119	85	99	113
240-215597-2	MW-195S_112224	118	86	101	112
240-215597-2	MW-195S_112224	116	85	97	105
240-215597-3	MW-37_112224	113	77	89	103
240-215597-4	DUP-07	122	86	100	114
240-215597-4	DUP-07	116	79	91	106
LCS 240-637115/4	Lab Control Sample	108	94	97	102
LCS 240-637152/4	Lab Control Sample	107	91	92	99
MB 240-637115/7	Method Blank	121	89	101	110
MB 240-637152/7	Method Blank	116	77	87	104

#### 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)

Lab Sample ID	Client Sample ID	DCA
		(68-127)
240-215597-2	MW-195S_112224	105
240-215597-3	MW-37_112224	112
240-215597-4	DUP-07	108
240-215601-B-2 MS	Matrix Spike	111
240-215601-B-2 MSD	Matrix Spike Duplicate	107
LCS 240-637230/5	Lab Control Sample	111
MB 240-637230/7	Method Blank	107

#### Surrogate Legend

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

# QC Sample Results

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

Job ID: 240-215597-1

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

Lab Sample ID: MB 240-637115/7

Matrix: Water

Analysis Batch: 637115

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/01/24 13:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/01/24 13:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 13:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/01/24 13:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/01/24 13:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/01/24 13:18	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	121		62 - 137		12/01/24 13:18	1
4-Bromofluorobenzene (Surr)	89		56 - 136		12/01/24 13:18	1
Toluene-d8 (Surr)	101		78 - 122		12/01/24 13:18	1
Dibromofluoromethane (Surr)	110		73 - 120		12/01/24 13:18	1

Lab Sample ID: LCS 240-637115/4

Matrix: Water

Analysis Batch: 637115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	25.0	28.3		ug/L		113	63 - 134
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	77 - 123
Tetrachloroethene	25.0	27.2		ug/L		109	76 - 123
trans-1,2-Dichloroethene	25.0	28.7		ug/L		115	75 - 124
Trichloroethene	25.0	25.4		ug/L		102	70 - 122
Vinyl chloride	12.5	12.4		ug/L		99	60 - 144

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	102		73 - 120

Lab Sample ID: MB 240-637152/7

Matrix: Water

Analysis Batch: 637152

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/02/24 11:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/02/24 11:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/02/24 11:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/02/24 11:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/02/24 11:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/02/24 11:45	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	116		62 - 137		12/02/24 11:45	1
4-Bromofluorobenzene (Surr)	77		56 - 136		12/02/24 11:45	1
Toluene-d8 (Surr)	87		78 - 122		12/02/24 11:45	1

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# QC Sample Results

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

Job ID: 240-215597-1

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

Lab Sample ID: MB 240-637152/7

Matrix: Water

Analysis Batch: 637152

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	104		73 - 120		12/02/24 11:45	1

Lab Sample ID: LCS 240-637152/4

Matrix: Water

Analysis Batch: 637152

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	25.0	28.8		ug/L		115	63 - 134
cis-1,2-Dichloroethene	25.0	27.0		ug/L		108	77 - 123
Tetrachloroethene	25.0	26.2		ug/L		105	76 - 123
trans-1,2-Dichloroethene	25.0	29.0		ug/L		116	75 - 124
Trichloroethene	25.0	25.7		ug/L		103	70 - 122
Vinyl chloride	12.5	11.8		ug/L		94	60 - 144

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		62 - 137
4-Bromofluorobenzene (Surr)	91		56 - 136
Toluene-d8 (Surr)	92		78 - 122
Dibromofluoromethane (Surr)	99		73 - 120

Lab Sample ID: 240-215341-C-3 MS

Matrix: Water

Analysis Batch: 637152

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1,1-Dichloroethene	1.0	U	25.0	29.0		ug/L		116	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	26.4		ug/L		106	66 - 128
Tetrachloroethene	1.0	U	25.0	28.4		ug/L		113	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	28.2		ug/L		113	56 - 136
Trichloroethene	1.0	U	25.0	26.0		ug/L		104	61 - 124
Vinyl chloride	1.0	U	12.5	12.6		ug/L		101	43 - 157

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	95		78 - 122
Dibromofluoromethane (Surr)	96		73 - 120

Lab Sample ID: 240-215341-C-3 MSD

Matrix: Water

Analysis Batch: 637152

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
				Result	Qualifier						
1,1-Dichloroethene	1.0	U	25.0	30.0		ug/L		120	56 - 135	4	26
cis-1,2-Dichloroethene	1.0	U	25.0	26.6		ug/L		106	66 - 128	1	14
Tetrachloroethene	1.0	U	25.0	28.4		ug/L		114	62 - 131	0	20
trans-1,2-Dichloroethene	1.0	U	25.0	28.0		ug/L		112	56 - 136	1	15
Trichloroethene	1.0	U	25.0	26.1		ug/L		105	61 - 124	0	15

Eurofins Cleveland

# QC Sample Results

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

Job ID: 240-215597-1

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

Lab Sample ID: 240-215341-C-3 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 637152

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	1.0	U	12.5	12.8		ug/L		103	43 - 157	2	24
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	109		62 - 137								
4-Bromofluorobenzene (Surr)	97		56 - 136								
Toluene-d8 (Surr)	99		78 - 122								
Dibromofluoromethane (Surr)	102		73 - 120								

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

Lab Sample ID: MB 240-637230/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 637230

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			12/02/24 14:29	1
<b>MB MB</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		68 - 127					12/02/24 14:29	1

Lab Sample ID: LCS 240-637230/5

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 637230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	10.0	8.80		ug/L		88	75 - 121
<b>LCS LCS</b>							
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	111		68 - 127				

Lab Sample ID: 240-215601-B-2 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 637230

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.0	U	10.0	8.96		ug/L		90	20 - 180
<b>MS MS</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	111		68 - 127						

Lab Sample ID: 240-215601-B-2 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 637230

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	7.84		ug/L		78	20 - 180	13	20

Eurofins Cleveland



# QC Sample Results

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

Job ID: 240-215597-1

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

Lab Sample ID: 240-215601-B-2 MSD

Matrix: Water

Analysis Batch: 637230

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
1,2-Dichloroethane-d4 (Surr)	107		68 - 127

- 1
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- 13
- 14

# QC Association Summary

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

Job ID: 240-215597-1

## GC/MS VOA

### Analysis Batch: 637115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-215597-1	TRIP BLANK_106	Total/NA	Water	8260D	
240-215597-2	MW-195S_112224	Total/NA	Water	8260D	
240-215597-4	DUP-07	Total/NA	Water	8260D	
MB 240-637115/7	Method Blank	Total/NA	Water	8260D	
LCS 240-637115/4	Lab Control Sample	Total/NA	Water	8260D	

### Analysis Batch: 637152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-215597-2	MW-195S_112224	Total/NA	Water	8260D	
240-215597-3	MW-37_112224	Total/NA	Water	8260D	
240-215597-4	DUP-07	Total/NA	Water	8260D	
MB 240-637152/7	Method Blank	Total/NA	Water	8260D	
LCS 240-637152/4	Lab Control Sample	Total/NA	Water	8260D	
240-215341-C-3 MS	Matrix Spike	Total/NA	Water	8260D	
240-215341-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

### Analysis Batch: 637230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-215597-2	MW-195S_112224	Total/NA	Water	8260D SIM	
240-215597-3	MW-37_112224	Total/NA	Water	8260D SIM	
240-215597-4	DUP-07	Total/NA	Water	8260D SIM	
MB 240-637230/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-637230/5	Lab Control Sample	Total/NA	Water	8260D SIM	
240-215601-B-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-215601-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

# Lab Chronicle

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

Job ID: 240-215597-1

**Client Sample ID: TRIP BLANK\_106**

**Lab Sample ID: 240-215597-1**

Date Collected: 11/22/24 00:00

Matrix: Water

Date Received: 11/23/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	637115	LEE	EET CLE	12/01/24 14:58

**Client Sample ID: MW-195S\_112224**

**Lab Sample ID: 240-215597-2**

Date Collected: 11/22/24 10:42

Matrix: Water

Date Received: 11/23/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	637115	LEE	EET CLE	12/01/24 15:18
Total/NA	Analysis	8260D		100	637152	LEE	EET CLE	12/02/24 13:05
Total/NA	Analysis	8260D SIM		1	637230	R5XG	EET CLE	12/02/24 17:13

**Client Sample ID: MW-37\_112224**

**Lab Sample ID: 240-215597-3**

Date Collected: 11/22/24 12:05

Matrix: Water

Date Received: 11/23/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	637152	LEE	EET CLE	12/02/24 13:25
Total/NA	Analysis	8260D SIM		1	637230	R5XG	EET CLE	12/02/24 17:36

**Client Sample ID: DUP-07**

**Lab Sample ID: 240-215597-4**

Date Collected: 11/22/24 00:00

Matrix: Water

Date Received: 11/23/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	637115	LEE	EET CLE	12/01/24 15:58
Total/NA	Analysis	8260D		100	637152	LEE	EET CLE	12/02/24 13:45
Total/NA	Analysis	8260D SIM		1	637230	R5XG	EET CLE	12/02/24 18:00

**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: 240-215597-1


## 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
California	State	2927	02-28-25
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-24

# Chain of Custody Record

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Client Contact		Regulatory program: <input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other										TestAmerica Laboratories, Inc.						
Company Name: Arcadis		Client Project Manager: Kris Hinskey			Site Contact: Christina Weaver			Lab Contact: Mike DelMonico			COC No:							
Address: 28550 Cabot Drive, Suite 500		Telephone: 248-994-2240			Telephone: 248-994-2240			Telephone: 330-497-9396			1 of 1 COCs							
City/State/Zip: Novi, MI, 48377		Email: kristoffer.hinskey@arcadis.com			Analysis Turnaround Time			Analyses					For lab use only					
Phone: 248-994-2240		Sampler Name: <i>Lothie Jay</i>			TAT if different from below 10 day <input checked="" type="checkbox"/> 3 weeks <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260D	cis-1,2-DCE 8260D	Trans-1,2-DCE 8260D	PCE 8260D	TCE 8260D	Vinyl Chloride 8260D	1,4-Dioxane 8260D SIM	Walk-in client	
Project Name: Ford LTP																	Method of Shipment/Carrier:	
Project Number: 30206169.0401.03		Shipping/Tracking No:			Matrix		Containers & Preservatives					Sample Specific Notes / Special Instructions:						
PO # US3410018772		Sample Date		Sample Time										Air	Aqueous	Sediment	Solid	Other:
TRIP BLANK_106		---	---	1														1 Trip Blank
MW-1955-112224		11/22/24	1042	6														3 VOAs for 8260D 3 VOAs for 8260D SIM
MW-37-112224		1	1205	6														
DUP-07		1	---	6														
<div style="text-align: right; padding-right: 20px;">  <p>240-215597 COC</p> </div>																		
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown										<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Special Instructions/QC Requirements & Comments:																		
Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728 Level IV Reporting requested.																		
Relinquished by: <i>[Signature]</i>		Company: ARCADIS			Date/Time: 11/22/24 1305			Received by: <i>[Signature]</i>			Company: ARCADIS			Date/Time: 11/22/24 1305				
Relinquished by: <i>[Signature]</i>		Company: ARCADIS			Date/Time: 11/22/24 1330			Received by: <i>[Signature]</i>			Company: CETA			Date/Time: 11/22/24 1400				
Relinquished by: <i>[Signature]</i>		Company: CETA			Date/Time: 11/22/24 1430			Received in Laboratory by: <i>[Signature]</i>			Company: CUR			Date/Time: 11/23/24 800				

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**Eurofins - Cleveland Sample Receipt Form/Narrative** Login # \_\_\_\_\_

Barberon Facility \_\_\_\_\_

Client ATCOGIS Site Name \_\_\_\_\_ Cooler unpacked by: JC

Cooler Received on 11-23-21 Opened on 11-23-21

FedEx: 1<sup>st</sup> Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other \_\_\_\_\_

Receipt After-hours Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_

Eurofins Cooler # EC Foam Box Client Cooler Box Other \_\_\_\_\_

Packing material used: Bubble Wrap Foam Plastic Bag None Other \_\_\_\_\_

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt  See Multiple Cooler Form

IR GUN # 21 (CF 0.2 °C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp \_\_\_\_\_ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity \_\_\_\_\_ Yes No NA

-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# HC448976

14 Were VOAs on the COC? Yes No NA

15 Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 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 Samples processed by: \_\_\_\_\_

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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/T of number(s). \_\_\_\_\_

VOA Sample Preservation - Date/Time VOAs Frozen. \_\_\_\_\_

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

Login #: \_\_\_\_\_

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 21	4.8	5.0	<del>Wet Ice</del> Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	2.0	2.2	<del>Wet Ice</del> Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None

See Temperature Excursion Form

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservation</u> <u>Temp</u>	<u>Preservation</u> <u>Added</u>	<u>Preservation</u> <u>Lot Number</u>
TRIP BLANK_106	240-215597-A-1	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-A-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-B-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-C-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-D-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-E-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-195S_112224	240-215597-G-2	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-A-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-B-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-C-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-D-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-E-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
MW-37_112224	240-215597-F-3	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-A-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-B-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-C-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-D-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-E-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____
DUP-07	240-215597-F-4	Voa Vial 40ml - Hydrochloric Acid	_____	_____	_____	_____



# DATA VERIFICATION REPORT



December 05, 2024

Megan Meckley  
Arcadis  
28550 Cabot Drive  
Suite 500  
Novi, MI US 48377

CADENA project ID: E203728  
Project: Ford Livonia Transmission Plant - Soil Gas, Ground Water and Soil  
Project number: 30206169.0401.04\_WA-03  
Event Specific Scope of Work References: Sample COC  
Laboratory: Eurofins Environment Testing LLC - Cleveland  
Laboratory submittal: 215597-1  
Sample date: 2024-11-22  
Report received by CADENA: 2024-12-05  
Initial Data Verification completed by CADENA: 2024-12-05  
Number of Samples:4  
Sample Matrices:Water  
Test Categories:GCMS VOC  
**Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.**

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 <http://clms.cadenaco.com/index.cfm>.

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.
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: 215597-1

<b>Sample Name:</b>	TRIP BLANK_106	MW-195S_112224	MW-37_112224	DUP-07
<b>Lab Sample ID:</b>	2402155971	2402155972	2402155973	2402155974
<b>Sample Date:</b>	11/22/2024	11/22/2024	11/22/2024	11/22/2024

Analyte	Cas No.	TRIP BLANK_106				MW-195S_112224				MW-37_112224				DUP-07			
		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	---	1.5	1.0	ug/l	---	ND	1.0	ug/l	---	1.6	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	140	100	ug/l	---	ND	1.0	ug/l	---	140	100	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	250	100	ug/l	---	ND	1.0	ug/l	---	250	100	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	3100	100	ug/l	---	0.47	1.0	ug/l	J	3200	100	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	3.1	1.0	ug/l	---	ND	1.0	ug/l	---	3.1	1.0	ug/l	---

OSW-8260DSIM

1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
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