PREPARED FOR

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

Generated 5/12/2025 7:23:55 AM

JOB DESCRIPTION

Ford LTP

JOB NUMBER

240-223785-1

Eurofins Cleveland 180 S. Van Buren Avenue Barberton OH 44203

Eurofins Cleveland

Job Notes

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Authorization

Generated 5/12/2025 7:23:55 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: 240-223785-1

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Definitions/Glossary

Client: Arcadis US Inc.

Job ID: 240-223785-1

Project/Site: Ford LTP

Qualifiers

GC/MS VOA

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

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Case Narrative

Client: Arcadis US Inc. Project: Ford LTP

Job ID: 240-223785-1 Eurofins Cleveland

Job Narrative 240-223785-1

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 5/7/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.7°C and 2.9°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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Job ID: 240-223785-1

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Method Summary

Client: Arcadis US Inc.

Project/Site: Ford LTP

Job ID: 240-223785-1

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: 240-223785-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-223785-1	TRIP BLANK_8	Water	05/02/25 00:00	05/07/25 08:00
240-223785-2	MW-176S_050225	Water	05/02/25 14:00	05/07/25 08:00

Detection Summary

Client: Arcadis US Inc.

Project/Site: Ford LTP

Job ID: 240-223785-1

Client Sample ID: TRIP BLANK_8 Lab Sample ID: 240-223785-1

No Detections.

Client Sample ID: MW-176S_050225 Lab Sample ID: 240-223785-2

No Detections.

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This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK_8

Lab Sample ID: 240-223785-1 Date Collected: 05/02/25 00:00 **Matrix: Water**

Date Received: 05/07/25 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			05/08/25 15:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/08/25 15:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 15:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/08/25 15:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 15:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/08/25 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		62 - 137			-		05/08/25 15:03	1
4-Bromofluorobenzene (Surr)	85		56 ₋ 136					05/08/25 15:03	1
Toluene-d8 (Surr)	91		78 - 122					05/08/25 15:03	1
Dibromofluoromethane (Surr)	98		73 - 120					05/08/25 15:03	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

Client Sample ID: MW-176S_050225

Date Collected: 05/02/25 14:00 Date Received: 05/07/25 08:00

Dibromofluoromethane (Surr)

Lab Sample ID: 240-223785-2

05/08/25 17:04

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/08/25 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		68 - 127			-		05/08/25 15:08	1
Method: SW846 8260D - Volati	le Organic Comp	ounds by G	C/MS						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/08/25 17:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/08/25 17:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 17:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/08/25 17:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 17:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/08/25 17:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137			_		05/08/25 17:04	1
4-Bromofluorobenzene (Surr)	88		56 - 136					05/08/25 17:04	1
Toluene-d8 (Surr)	96		78 ₋ 122					05/08/25 17:04	1

73 - 120

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Surrogate Summary

Client: Arcadis US Inc.

Job ID: 240-223785-1

Project/Site: Ford LTP

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

Matrix: Water Prep Type: Total/NA

				Percent Su	rogate Reco
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-223785-1	TRIP BLANK_8	101	85	91	98
240-223785-2	MW-176S_050225	107	88	96	103
240-223800-D-3 MSD	Matrix Spike Duplicate	90	91	95	95
240-223800-E-3 MS	Matrix Spike	100	91	94	98
LCS 240-655247/5	Lab Control Sample	97	90	93	96
MB 240-655247/9	Method Blank	97	85	91	96

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)	
240-223703-A-5 MS	Matrix Spike	113	
240-223703-A-5 MSD	Matrix Spike Duplicate	116	
240-223785-2	MW-176S_050225	114	
LCS 240-655190/4	Lab Control Sample	107	
MB 240-655190/6	Method Blank	109	
Surrogate Legend			

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

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Client: Arcadis US Inc. Job ID: 240-223785-1

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

Lab Sample ID: MB 240-655247/9

Matrix: Water

Project/Site: Ford LTP

Analysis Batch: 655247

Client Sample ID: Method Blank	
Duny Town Total/NIA	

Prep Type: Total/NA

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/08/25 14:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/08/25 14:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/08/25 14:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/08/25 14:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/08/25 14:14	1

MB MB Qualifier %Recovery Surrogate Limits Prepared Dil Fac Analyzed 1,2-Dichloroethane-d4 (Surr) 62 - 137 05/08/25 14:14 97 4-Bromofluorobenzene (Surr) 85 56 - 136 05/08/25 14:14 Toluene-d8 (Surr) 91 78 - 122 05/08/25 14:14 Dibromofluoromethane (Surr) 96 73 - 120 05/08/25 14:14

Lab Sample ID: LCS 240-655247/5

Matrix: Water

Analysis Batch: 655247

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 12.5 86 63 - 134 1,1-Dichloroethene 10.8 ug/L cis-1,2-Dichloroethene 12.5 11.1 ug/L 89 77 - 123 Tetrachloroethene 12.5 11.5 ug/L 92 76 - 123 75 - 124 trans-1,2-Dichloroethene 12.5 11.5 ug/L 92 Trichloroethene 91 70 - 122 12.5 11.4 ug/L Vinyl chloride 12.5 9.98 ug/L 60 - 144

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 97 62 - 137 4-Bromofluorobenzene (Surr) 90 56 - 136 Toluene-d8 (Surr) 93 78 - 122 Dibromofluoromethane (Surr) 73 - 120 96

Lab Sample ID: 240-223800-D-3 MSD

Matrix: Water

Analysis Batch: 655247

Client Sample ID: Matrix Spike Duplicate 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	1.0	U	12.5	10.2		ug/L		82	56 - 135	0	26
cis-1,2-Dichloroethene	1.0	U	12.5	10.4		ug/L		83	66 - 128	3	14
Tetrachloroethene	1.0	U	12.5	10.1		ug/L		81	62 - 131	7	20
trans-1,2-Dichloroethene	1.0	U	12.5	10.3		ug/L		83	56 - 136	8	15
Trichloroethene	1.0	U	12.5	10.5		ug/L		84	61 - 124	8	15
Vinyl chloride	1.0	U	12.5	8.90		ug/L		71	43 - 157	2	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		62 - 137
4-Bromofluorobenzene (Surr)	91		56 - 136
Toluene-d8 (Surr)	95		78 - 122

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5/12/2025

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Job ID: 240-223785-1

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

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

Lab Sample ID: 240-223800-D-3 MSD **Matrix: Water**

Analysis Batch: 655247

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

MSD MSD

Surrogate %Recovery Qualifier Limits Dibromofluoromethane (Surr) 95 73 - 120

Lab Sample ID: 240-223800-E-3 MS

Matrix: Water

Analysis Batch: 655247

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

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1,1-Dichloroethene 1.0 U 12.5 10.3 ug/L 82 56 - 135 cis-1,2-Dichloroethene 1.0 U 12.5 80 66 - 128 10.1 ug/L Tetrachloroethene 1.0 U 12.5 9.49 ug/L 76 62 - 131 77 trans-1,2-Dichloroethene 1.0 U 12.5 9.58 ug/L 56 - 136 Trichloroethene 1.0 U 12.5 9.72 ug/L 78 61 - 124 Vinyl chloride 1.0 U 12.5 9.09 ug/L 43 - 157

MS MS

MR MR

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	91		56 - 136
Toluene-d8 (Surr)	94		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

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

Lab Sample ID: MB 240-655190/6

Matrix: Water

Analysis Batch: 655190

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	Result	Qualifier	RL M	/IDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/08/25 10:03	1
	МВ	МВ							

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 109 68 - 127 05/08/25 10:03

Lab Sample ID: LCS 240-655190/4

Matrix: Water			Prep Type: Total/NA
Analysis Batch: 655190			
	Snike	LCS LCS	%Rec

Analyte Added Result Qualifier Unit %Rec Limits 1,4-Dioxane 10.0 7.97 ug/L 75 - 121

LCS LCS

%Recovery Qualifier Surrogate Limits 68 - 127 1,2-Dichloroethane-d4 (Surr) 107

Lab Sample ID: 240-223703-A-5 MS

Matrix:

Analysi

: Water				Prep Type: Total/NA
sis Batch: 655190				
	Sample Sample	Spike	MS MS	%Rec

Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits 1,4-Dioxane 2.0 U 10.0 8.18 ug/L 82 20 - 180

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5/12/2025

Client Sample ID: Matrix Spike

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Client Sample ID: Lab Control Sample

QC Sample Results

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

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

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1,2-Dichloroethane-d4 (Surr)

	MS MS	
Surrogate	%Recovery Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113	68 - 127
Lab Sample ID: 240-223703-	-A-5 MSD	

68 - 127

Lab Sample ID: 240-223703-A	4-5 MSD					Client Sa	ampie iL): Matrix S	ріке Dup	olicate
Matrix: Water								Prep 1	Type: Tot	tal/NA
Analysis Batch: 655190										
	Sample Sample	Spike	MSD	MSD				%Rec		RPD
Δnalvte	Result Qualifier	Δdded	Result	Qualifier	Unit	D	%Rec	l imits	RPD	Limit

			- 1						,		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	2.0	U	10.0	8.65		ug/L		86	20 - 180	6	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

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QC Association Summary

Client: Arcadis US Inc.

Project/Site: Ford LTP

Job ID: 240-223785-1

GC/MS VOA

Analysis Batch: 655190

Lab Sample ID 240-223785-2	Client Sample ID MW-176S_050225	Prep Type Total/NA	Matrix Water	Method 8260D SIM	Prep Batch
MB 240-655190/6	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-655190/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-223703-A-5 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-223703-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 655247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223785-1	TRIP BLANK_8	Total/NA	Water	8260D	<u> </u>
240-223785-2	MW-176S_050225	Total/NA	Water	8260D	
MB 240-655247/9	Method Blank	Total/NA	Water	8260D	
LCS 240-655247/5	Lab Control Sample	Total/NA	Water	8260D	
240-223800-D-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	
240-223800-E-3 MS	Matrix Spike	Total/NA	Water	8260D	

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Lab Chronicle

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK_8

Lab Sample ID: 240-223785-1 Date Collected: 05/02/25 00:00

Matrix: Water

Dilution Batch Batch Batch Prepared Method Prep Type Туре Run Factor **Number Analyst** Lab or Analyzed Total/NA 8260D 655247 R5XG EET CLE 05/08/25 15:03 Analysis

Client Sample ID: MW-176S_050225 Lab Sample ID: 240-223785-2

Date Collected: 05/02/25 14:00 **Matrix: Water**

Date Received: 05/07/25 08:00

Date Received: 05/07/25 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	655247	R5XG	EET CLE	05/08/25 17:04
Total/NA	Analysis	8260D SIM		1	655190	R5XG	EET CLE	05/08/25 15:08

Laboratory References:

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

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Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 240-223785-1 Project/Site: Ford LTP

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

MICHIGAN 190

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Chain of Custody Record

TestAmerica

TestA	merica Labora	tory location:	Farm	ington	Hills -	- 3885	5 Hill:	s Tec	h Dri	ive, S	Suite	600, Fa	rming	ton Hi	lls 48	331									THE	LEADER IN ENVIRONMENTAL TEST	TING
Client Contact	Regulat	ory program:		Г	DW		Γ	NPD	ES		_ F	RCRA	١	Oth	er [-								
Company Name: Areadis	Client Project	Manager: Mega	an Me	ckley			Site	Cont	act: S	Sama	intha	Szpaicl	hler			Lab (Conta	t: Mik	e Del	Monic	0	—	\dashv	-		TestAmerica Laboratories, I	inc.
Address: 28550 Cabot Drive, Suite 500	Telephone: 248								e: 24							Teler	hone	330-4	7-93	06			_		+		\dashv
City/State/Zip: Novi, MI, 48377							L						_	_		1.00	mone.	330-4.		nalys	44*			4	_	1 of 1 COCs	
Phone: 248-994-2240	Email: megan.	meckley@arcac	dis.cor	n				A.B.ZI	y313 1	urna	troun	d Time			┢	Г				lialys	es		\dashv		_	or lab use only	
Project Name: Ford LTP	Sampler Name Man	iam t	ta	na	ni		ı	o da		F 3	dow 3 wee 2 wee		7													Walk-in client	-
Project Number: 30251157.401.04	Method of Ship						1	o da	•	-	l wee	:k	2	۳			_				SIM						
PO # US3460023914	Shipping/Track	ting No:									2 day: 1 day		, Alvert	=C/Grab=C	9	8260D	CE 8260D			ө 8260D	8260D				J	ob/SDG No:	
Sample Identification	Sample Date	Sample Time	Air	Aqueous Sediment	Solid	Other:	112504	Con		HOW	Т	Other:	Filtered Com	=	1,1-DCE 8260D	cis-1,2-DCE 8260D	Trans-1,2-DCE	PCE 8260D	TCE 8260D	Vinyl Chloride	1,4-Dioxane					Sample Specific Notes / Special Instructions:	
TRIP BLANK_ 🖇				1					1				N	1 G	X	Х	Х	X	Х	X						1 Trip Blank	
MW-1765_050225	5/2/25	1400		6					6				1	1G	X	X	×	×	X	X	X					3 VOAs for 8260D 3 VOAs for 8260D SIM	
																								1			
																							li	41.			
																					1	1					
																					Ţ.	240-2	237	5 COC			
																								S COC	2		
Possible Hazard Identification ✓ Non-Hazard	☐ Poise	on B	Jnkr	own			S		e Disj Retur			ee may	be asse Dist					n ed lo i rchive		han lı) onths					
Special Instructions/QC Requirements & Comments: 173 (Submit all results through Cadena at jtomalia@cadenaco.c Level IV Reporting requested.		•	ost	-																							
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Page 18 of 25

5/12/2025

2

4

6

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11 12

	VOA Sample Preservation - Date/Time VOAs Frozen:
	Sample(s) were further preserved in the laboratory. Time preserved: Preservative(s) added/Lot number(s):
	Sample(s)were received with bubble > 6 mm in diameter. (Notify PM) 20. SAMPLE PRESERVATION
	19. SAMPLE CONDITION were received after the recommended holding time had expired. Sample(s) were received after the recommended holding time had expired. were received in a broken container.
	18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Additional next page Labeled by: MILL Labels Verified by: JYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY
	Concerning
	Contacted PM Date by via Verbal Voice Mail Other
	15. Were air bubbles >6 mm in any VOA vials? Larger than this. 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 17. Was a LL Hg or Me Hg trip blank present? Yes No
	13. Were all preserved sample(s) at the correct pH upon receipt? 14. 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 You
	9. For each sample, does the COC specify preservatives (VN), # of containers (VN), and sample type of grab/comp(NN)? 10. Were correct bottle(s) used for the test(s) indicated?
	Was/were the person(s) who collected the samples clearly identified on the COC? Did all bottles arrive in good condition (Unbroken)?
	Did custody papers accompany the sample(s)? Were the custody papers relinquished & signed in the appropriate place? Yes No
	-Were tamper/custody seals intact and uncompromised? Shippers' packing slip attached to the cooler(s)? Vec
	W on Ed.
	IR GUN # 13 (CF 75.5 °C) Observed Cooler Te
-	receipt Dry Ice Water None
	o Client Cooler Box
	Receipt After-hours: Drop-off Date/Time Storage Location
٧.	Received on S-7-25 Opened on S-7-25
	Client Ir Cadi's Site Name Cooler unpacked by:
	Eurofins - Cleveland Sample Receipt Form/Narrative Logiu # Logiu #

Page 19 of 25

			IR GUN #			
Wet Ice Blue Ice Dry Ice			IR GUN #:	Box Other	Client 8	
Wet Ice Blue Ice Dry Ice Woter None			IR GUN #:	Box Other	Client B	22
Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	Box Other	Client B	EC
Wet Ice Blue Ice Dry Ice Water Name			IR GUN #:	Box Other	Client B	E
Wet ice Blue ice Dry Ice Water Name			IR GUN #:	Box Other	Client b	EC
Wet Ice Blue Ice Dry Ice Water None			IR GUN #	Box Other	Client B	EC
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Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	Box Other	Client B	E.C.
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Wet ice Blue ice Dry ice Water None			IR GUN #:	Box Other	Client 5	గొ
Wel ice Blue ice Dry ice Water None			IR GUN #:	Box Officer	Client B	గొ
Wet Ice Blue Ice Dry Ice Water Nane			IR GUN #:	Box Olher	Client 8	වී
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Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	Box Other	Client b	EC
Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	Box Other	Client B	r
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Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	x Other	Client Box	EC .
Wet Ice Blue Ice Dry Ice Water None		The state of the s	R GUN-#:	x Other	Client Box	20
Wet.Ice Blue Ice Dry Ice- Water None	ا ا	ນ.	IR GUN #-	oxOlher	Client _Box	EC .
Wet ice Blue ice Dry ice Water None	2,9	7.4	IR GUN #: 3	x Other	Client Box	ñ
Coolant (Circle)	Corrected Temp °C	Observed Temp °C	IR Gun # (Circle)	ription)	Cooler Description (Circle)	Coo
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Firefins - Claveland Sample Receipt Militiale Cooler Form	nd Sample Recei	Firofins - Clavela	77.4		

5/7/2025

Login Container Summary Report

240-223785

5/12/2025

MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 TRIP BLANK_8 Client Sample ID Temperature readings 240-223785-F-2 240-223785-E-2 240-223785-D-2 240-223785-C-2 240-223785-B-2 240-223785-A-2 Lab ID 240-223785-A-1 Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acıd Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acıd Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acid Container Type Container pH Temp

<u>Preservation</u> <u>Preservation</u> <u>Added</u> <u>Lot Number</u>

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110

Chain of Custody Record

TestAmerica

No. AB331

Client Contact	Regulat	ory program:		-	DW	,	Γ	NPD	ES		┌ R	CRA	Г	Other	r											
ompany Name: Arcadis	Client Project !	Manager: Mega	n Me	ckley			Site	Cont	act: S	Sama	ntha S	zpaichle	er	_	<u>'</u>	Lab Co	ntact	Mike	DelN	lonico		_	_		TestAmeric	a Laboratorio
ddress: 28550 Cabot Drive, Suite 500																										
ity/State/Zip: Novi, MI, 48377	Telephone: 248	-994-2240					Tele	phon	e: 248	8-994	4-2240					Telepho	ne: 3	30-497	-9390	6					1 of	1 COC
349 004 3340	Email: megan.	neckley@arcad	lis.com	n				Analy	/sis T	WITHA	round	Time							An	alys	3 5		二		For lab use or	nly
bone: 248-994-2240	Sampler Name		_		_	_	TAT	ıf diffe	erent fre	om bel	low	_	1						- 1						Walk-in clien	at
roject Name: Ford LTP	Man	iam t	ta	na	n	l	١.	٠			3 week 2 week		1												1	
roject Number: 30251157.401.04	Method of Ship						1 '	0 day			l week		٦	ç			٦				₹				Lab sampling	
D # US3460023914	Shipping/Track	ding No:		_			1				2 days 1 day		mple (Y/N)	-C/Grab-G		Q093	82601			8260D	S 009				Job/SDG No:	
		-		М	atrix			Con	talner	1 & P	reservi	itives			12601	E 82	20	۵		ride	e 82					
Sample Identification	Sample Date	Sample Time	Je .	Aqueens	P P P	Other:	112504	HNO3	HCI	HO	NAOH	ther:	Filtered S.	Composite	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					e Specific Notes ial Instructions
TRIP BLANK_ 8	sample bate	Sample Time		1	100	5	H		1	2	2 7 -) 5	+	G	X		-		7		_	\dashv	=	_	+	
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MW-1765_050225	5/2/25	1400		6	-				6	4	4		n	G	X	Χ.	X	X	~	X	X		_			s for 8260D s for 8260D \$
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Possible Hazard Identification							+		a Dire	2000	I / A G	e may be		rad if				ad lone		1		\Box				-
Non-Hazard lammable cin Irritant			Jnk	-			l °				Client		Dispo			es are i		chive l		au i i		onths				
pecial Instructions/QC Requirements & Comments:	45 Bos	stan F	os.	1																						
ubmit all results through Cadena at jtomalia@cadenaco.cevel IV Reporting requested.																										
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clinquished by:	Company:	AOIS		S) Date		25		52 74	$\overline{}$	Rece	eived is	Labora	tory b	Y;///		12	_		omp	any:	E	-0	41		Date/Time:	25 13

Eurofins Cooler # Receipt After-hours: FedEx:_1"_ Grd._Exp Drop-off Date/Time UPS_FAS_(Waypoint) Client Drop Off __ Foam Box Client Cooler Вох Eurofins Courier Storage Location Other

Packing material used: Bubble Wrap COOLANT: Wet Ice Blue Ice Foam Dry Ice Plastic Bag Water None Nope No

Other

Cooler temperature upon receipt 15.5 Observed Cooler Temp. See Multiple Cooler Form

R GUN# (CF ا ن °C Corrected Cooler Temp B Tests that are not

2 Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? -Were the seals on the outside of the cooler(s) signed & dated?

B

ö

NA

B

Z E

Receiving:

checked for pH by

X

Yes

2

Oil and Grease

-Were tamper/custody seals intact and uncompromised? Shippers' packing slip attached to the cooler(s)?

Did custody papers accompany the sample(s)?

'n Were the custody papers relinquished & signed in the appropriate place?

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9

Was/were the person(s) who collected the samples clearly identified on the COC?

Did all bottles arrive in good condition (Unbroken)?

Could all bottle labels (ID/Date/Time) be reconciled with the COC?

10. Were correct bottle(s) used for the test(s) indicated? For each sample, does the COC specify preservatives (VIN), # of containers (YIN) and sample type of grab/comp(X/N)? No XES No

11. Sufficient quantity received to perform indicated analyses?

£ 600

Z

(3) z

Are these work share samples and all listed on the COC?

13. Were all preserved sample(s) at the correct pH upon receipt? If yes, Questions 13-17 have been checked at the originating laboratory

14. Were VOAs on the COC? Were air bubbles >6 mm in any VOA vials?

Was a LL Hg or Me Hg trip blank present? Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #

Larger than this

6

60

NA (S)

Yes

NA NA

pH Strip Lot# HC457151

Page 23 of 25

Date ই via Verbal Voice Mail Other Yes (No

Concerning

Contacted PM

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page

Labeled by: /// Labels Verified by: JYYYYYYYY

19. SAMPLE CONDITION

Sample(s) Sample(s) were received after the recommended holding time had expired. were received in a broken container.

were received with bubble >6 mm in diameter. (Notify PM)

were further preserved in the laboratory

20. SAMPLE PRESERVATION

Sample(s)

Time preserved: Sample(s) Preservative(s) added/Lot number(s):

Date/Time VOAs Frozen:

VOA Sample Preservation -

Water None				BOX CINEI	Client	25
Wellce Blueice Drylce			IR GUN #			
T Ue			IR GUN #	Box Other	Client b	č.
Blue			IR GUN #	Box Other	Client b	ñ
None			IR GUN #	Box Other	Cilent 8	EC
e ice None			IR GUN #:	Box Other	Client B	57
None			IR GUN #:	Box Other	Client b	23
Wet Ice Blue Ice Dry Ice Water None			IR GUN #:	Box Other	Client B	53
Wellice Bluelce Drylice Water None			IR GUN #:	Box Other	Client B.	ក
None			IR GUN #:	Box Other	Client B	77
Wettice Blue ice Dry ice Water Name			IR GUN #	Box Other	Client B	EC.
None			IR GUN #:	Box Other	Client B	EC
None None			IR GUN #	Box Other	Client B	ಕಿ
None			IR GUN #:	Box Other	Client b	EC
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Wet Ice Blue Ice Dry Ice Water Nane			IR GUN #:	Box Other	Client B	ő
e ice None			IR GUN #:	Box Other	Client b	E.C.
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10			IR GUN #	ox Other	Client Box	ñ
ie ice None			IR GUN #:	Box Other	Client Bo	EC .
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1140			-IR-GUN #:	ox Other	Client Box	۳,
1 th		ย) ยา	IR GUN #:	x Ofher	Client Box	EC J
Wet Ice Blue Ice Dry Ice Water None	10.0g	2.4	18 GUN #: 3	x Olher	Client Box	FC 5
Coolant (Circle)	IR Gun # Observed Corrected (Circle) Temp °C Temp °C	Observed Temp °C	IR Gun # (Circle)	ription)	Cooler Description (Circle)	Coo
	Indiable cooler Louis	ווים הפוווחוב ולברביחו	- Full Charles - Clorecte			

WI-XC-099 Cooler Receipt Form Page 2 Multiple Coolers

MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 MW-176S_050225 TRIPBLANK_8 Client Sample ID Temperature readings 240-223785-F-2 240-223785-E-2 240-223785-D-2 240-223785-C-2 240-223785-B-2 240-223785-A-2 240-223785-A-1 Lab ID Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acid Voa Vıal 40ml Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acid Voa Vial 40ml - Hydrochloric Acıd Voa Vial 40ml - Hydrochloric Acid Container Type Container pH Temp Preservation Preservation
Added Lot Number

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Page 1 of 1

5/12/2025

DATA VERIFICATION REPORT



May 12, 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: 223785-1 Sample date: 2025-05-02

Report received by CADENA: 2025-05-12

Initial Data Verification completed by CADENA: 2025-05-12

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 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.
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: 223785-1

		Sample Name: Lab Sample ID: Sample Date:	TRIP BL/ 240223 5/2/202	7851 5			MW-176 240223 5/2/202	7852 5	25	
	Analyta	Cas No.	Dogult	Report	Unito	Valid	Dogult	Report	Unito	Valid
	Analyte	Cas No.	Result	Limit	UIIIIS	Qualifier	Result	LIIIII	UIIIIS	Qualifier
GC/MS VOC										
OSW-8260	<u>0D</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		ND	1.0	ug/l	
OSW-826	<u>ODSIM</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 # 240-223785-1

CADENA Verification Report: 2025-05-12

Analyses Performed By: Eurofins Cleveland Barberton, Ohio

Report # 59438R Review Level: Tier III Project: 30251157.401.02

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-223785-1 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
Salliple ID	Labib	Watrix	Collection Date	raieiit Saiiipie	voc	VOC SIM
TRIP BLANK_8	240-223785-1	Water	05/02/2025		Х	
MW-176S_050225	240-223785-2	Water	05/02/2025		X	X

ANALYTICAL DATA PACKAGE DOCUMENTATION

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

Items Reviewed	Rep	orted	Perfor Accep	mance otable	Not
	No	Yes	No	Yes	Required
Sample receipt condition		Х		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	
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.

No compounds were detected in the samples within this SDG.

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

VOCs: 8260D/8260D-SIM	Rep	orted		rmance ptable	Not Required
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (G	C/MS)				
Tier II Validation					
Holding times/Preservation		Х		Х	
Tier III Validation	<u>'</u>				'
System performance and column resolution		Х		Х	
Initial calibration %RSDs		Х		Х	
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х		Х	
Instrument tune and performance check		Х		Х	
lon abundance criteria for each instrument used		Х		Х	
Field Duplicate RPD	Х				Х
Internal standard		Х		Х	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		Х		Х	
B. Quantitation Reports		Х		Х	
C. RT of sample compounds within the established RT windows		Х		Х	
D. Transcription/calculation errors present		Х		X	
E. Reporting limits adjusted to reflect sample dilutions		Х		Х	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Febin J S

SIGNATURE:

DATE: June 2, 2025

PEER REVIEW: Andrew Korycinski

DATE: June 5, 2025

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

MICHIGAN 190

1/10

Chain of Custody Record

TestAmerica

TestA	merica Labora	tory location:	Farm	ington	Hills -	- 3885	55 Hill	s Tec	ch Dri	ive, S	Suite	600, Fa	arming	ton Hi	lls 48	331									THE	LEADER IN ENVIRONMENTAL TEST	ING
Client Contact	Regulat	ory program:		Г	DW			NPD	ES		F 1	RCRA	1	Oth	ner				-								
Company Name: Areadis	Client Project	Manager: Mega	ın Me	ckley			Site	Cont	tact: 5	Sama	antha	Szpaicl	hler			Lab (Conta	t: Mik	e Del	Monic	0	—	\dashv	-		TestAmerica Laboratories, I	nc.
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PO # US3460023914	Shipping/Track	ting No:								Г	2 day 1 day		100	=C/Grab=C	9	8260D	CE 8260D			ө 8260D	8260D				J	ob/SDG No:	
Sample Identification	Sample Date	Sample Time	Air	Aqueous Sediment	Solid	Other:	112504	Con		HOW	Т	Other:	- 1	Composite=C/Grab=G	1,1-DCE 8260D	cis-1,2-DCE 8260D	Trans-1,2-DCE	PCE 8260D	TCE 8260D	Vinyl Chloride	1,4-Dioxane					Sample Specific Notes / Special Instructions:	
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MW-1765_050225	5/2/25	1400		6					6				1	1G	X	X	×	×	X	X	X					3 VOAs for 8260D 3 VOAs for 8260D SIM	
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5/12/2025

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11 12

Definitions/Glossary

Client: Arcadis US Inc.

Job ID: 240-223785-1

Project/Site: Ford LTP

Qualifiers

GC/MS VOA

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

5

6

0

9

4 4

12

IR

Client Sample Results

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

Client Sample ID: TRIP BLANK_8

Date Received: 05/07/25 08:00

Dibromofluoromethane (Surr)

Lab Sample ID: 240-223785-1 Date Collected: 05/02/25 00:00

Matrix: Water

05/08/25 15:03

Method: SW846 8260D - Volatile Organic Compounds by GC/MS Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac 1.0 1,1-Dichloroethene 1.0 U 0.49 ug/L 05/08/25 15:03 cis-1,2-Dichloroethene 1.0 U 1.0 0.46 ug/L 05/08/25 15:03 Tetrachloroethene 1.0 U 1.0 0.44 ug/L 05/08/25 15:03 trans-1,2-Dichloroethene 1.0 U 1.0 0.51 ug/L 05/08/25 15:03 Trichloroethene 1.0 U 1.0 0.44 ug/L 05/08/25 15:03 Vinyl chloride 0.45 ug/L 1.0 U 1.0 05/08/25 15:03 %Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 101 62 - 137 05/08/25 15:03 4-Bromofluorobenzene (Surr) 85 05/08/25 15:03 56 - 136 91 78 - 122 05/08/25 15:03 Toluene-d8 (Surr)

73 - 120

Client Sample Results

Client: Arcadis US Inc. Job ID: 240-223785-1

Project/Site: Ford LTP

Surrogate

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Client Sample ID: MW-176S_050225

Date Collected: 05/02/25 14:00

%Recovery Qualifier

107

88

96

103

Lab Sample ID: 240-223785-2 Matrix: Water

Analyzed

05/08/25 17:04

05/08/25 17:04

05/08/25 17:04

05/08/25 17:04

Prepared

Date Received: 05/07/25 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/08/25 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)			68 - 127			-		05/08/25 15:08	1
Method: SW846 8260D - Volat Analyte	Result	Qualifier	RL		Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
		Qualifier			Unit ug/L	<u>D</u> .	Prepared	Analyzed 05/08/25 17:04	Dil Fac
Analyte	Result	Qualifier U	RL	0.49		<u>D</u> .	Prepared	·	Dil Fac
Analyte 1,1-Dichloroethene	Result 1.0	Qualifier U U	RL	0.49 0.46	ug/L	<u>D</u> .	Prepared	05/08/25 17:04	Dil Fac 1 1 1
Analyte 1,1-Dichloroethene cis-1,2-Dichloroethene Tetrachloroethene	Result 1.0 1.0	Qualifier U U U	1.0 1.0	0.49 0.46 0.44	ug/L ug/L	<u>D</u> -	Prepared	05/08/25 17:04 05/08/25 17:04	Dil Fac 1 1 1 1
Analyte 1,1-Dichloroethene cis-1,2-Dichloroethene	Result 1.0 1.0 1.0	Qualifier U U U U	1.0 1.0 1.0	0.49 0.46 0.44 0.51	ug/L ug/L ug/L	D .	Prepared	05/08/25 17:04 05/08/25 17:04 05/08/25 17:04	Dil Fac 1 1 1 1 1 1 1

Limits

62 - 137

56 - 136

78 - 122

73 - 120

Dil Fac