PREPARED FOR

Attn: Kristoffer Hinskey ARCADIS US Inc 28550 Cabot Drive Suite 500 Novi, Michigan 48377

Generated 5/18/2023 4:12:48 PM

JOB DESCRIPTION

Ford LTP - Off Site

JOB NUMBER

240-184786-1

Eurofins Cleveland 180 S. Van Buren Avenue Barberton OH 44203

Eurofins Cleveland

Job Notes

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Authorization

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Authorized for release by Michael DelMonico, Project Manager I <u>Michael.DelMonico@et.eurofinsus.com</u> (330)497-9396 Client: ARCADIS US Inc Project/Site: Ford LTP - Off Site Laboratory Job ID: 240-184786-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	11
QC Sample Results	12
QC Association Summary	14
Lab Chronicle	15
Certification Summary	16
Chain of Custody	17
Receipt Checklists	21

q

4

R

9

10

12

14

Definitions/Glossary

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

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.
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Eisted 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

Eurofins Cleveland

Page 4 of 21 5/18/2023

Case Narrative

Client: ARCADIS US Inc

Job ID: 240-184786-1 Project/Site: Ford LTP - Off Site

Job ID: 240-184786-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-184786-1

Receipt

The samples were received on 5/5/2023 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 1.0°C and 1.8°C

GC/MS VOA

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

Method Summary

Client: ARCADIS US Inc

Project/Site: Ford LTP - Off Site

Job ID: 240-184786-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	EET EDI
5030C	Purge and Trap	SW846	EET EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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Sample Summary

Client: ARCADIS US Inc

Project/Site: Ford LTP - Off Site

Job ID: 240-184786-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-184786-1	TRIP BLANK_164	Water	05/03/23 00:00	05/05/23 08:00
240-184786-2	MW-158S_050323	Water	05/03/23 13:15	05/05/23 08:00

- 3

4

9

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13

14

Detection Summary

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Client Sample ID: TRIP BLANK_164 Lab Sample ID: 240-184786-1

No Detections.

No Detections.

3

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5

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8

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13

14

Client Sample Results

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Client Sample ID: TRIP BLANK_164

Date Collected: 05/03/23 00:00 Date Received: 05/05/23 08:00 Lab Sample ID: 240-184786-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/12/23 15:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/12/23 15:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 15:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/12/23 15:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 15:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/12/23 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 128					05/12/23 15:14	1
Dibromofluoromethane (Surr)	100		77 - 124					05/12/23 15:14	1
Toluene-d8 (Surr)	102		80 - 120					05/12/23 15:14	1
4-Bromofluorobenzene	98		76 - 120					05/12/23 15:14	1

Client Sample Results

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Client Sample ID: MW-158S_050323

104

112

Date Collected: 05/03/23 13:15 Date Received: 05/05/23 08:00

Toluene-d8 (Surr)

4-Bromofluorobenzene

Lab Sample ID: 240-184786-2

05/12/23 17:48

05/12/23 17:48

Matrix: Water

Method: SW846 8260D SIM Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/16/23 12:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		75 - 133			•		05/16/23 12:14	1
- Method: SW846 8260D - Vo	latile Organic	Compound	ds by GC/MS						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/12/23 17:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/12/23 17:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/12/23 17:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 17:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/12/23 17:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 128					05/12/23 17:48	1
Dibromofluoromethane (Surr)	110		77 - 124					05/12/23 17:48	1

80 - 120

76 - 120

Surrogate Summary

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)				
		DCA	DBFM	TOL	BFB	
Lab Sample ID	Client Sample ID	(70-128)	(77-124)	(80-120)	(76-120)	
240-184786-1	TRIP BLANK_164	99	100	102	98	
240-184786-2	MW-158S_050323	105	110	104	112	
LCS 460-908741/4	Lab Control Sample	97	97	104	98	
LCSD 460-908741/5	Lab Control Sample Dup	101	99	105	101	
MB 460-908741/9	Method Blank	99	98	103	94	
Surrogate Legend						

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

TOL = Toluene-d8 (Surr) BFB = 4-Bromofluorobenzene

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

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB	
Lab Sample ID	Client Sample ID	(75-133)	
240-184786-2	MW-158S_050323	94	
LCS 460-909423/3	Lab Control Sample	96	
LCSD 460-909423/4	Lab Control Sample Dup	91	
MB 460-909423/7	Method Blank	92	

Surrogate Legend

BFB = 4-Bromofluorobenzene

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Page 11 of 21

5/18/2023

Client: ARCADIS US Inc Job ID: 240-184786-1

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

Lab Sample ID: MB 460-908741/9

Matrix: Water

Analysis Batch: 908741

Project/Site: Ford LTP - Off Site

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte D Prepared 1,1-Dichloroethene 1.0 U 1.0 0.49 ug/L 05/12/23 11:09 cis-1,2-Dichloroethene 1.0 U 1.0 0.46 ug/L 05/12/23 11:09 1.0 U 0.44 ug/L Tetrachloroethene 1.0 05/12/23 11:09 0.51 ug/L trans-1,2-Dichloroethene 1.0 U 1.0 05/12/23 11:09 Trichloroethene 1.0 U 1.0 0.44 ug/L 05/12/23 11:09 Vinyl chloride 1.0 U 1.0 0.45 ug/L 05/12/23 11:09

MB MB Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 99 70 - 128 1,2-Dichloroethane-d4 (Surr) 05/12/23 11:09 Dibromofluoromethane (Surr) 98 77 - 124 05/12/23 11:09 103 80 - 120 Toluene-d8 (Surr) 05/12/23 11:09 4-Bromofluorobenzene 94 76 - 120 05/12/23 11:09

Lab Sample ID: LCS 460-908741/4

Matrix: Water

Analysis Batch: 908741

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike LCS LCS %Rec Added Limits Analyte Result Qualifier Unit %Rec 1,1-Dichloroethene 20.0 98 68 - 133 19.6 ug/L cis-1,2-Dichloroethene 20.0 20.7 ug/L 104 78 - 121 Tetrachloroethene 20.0 20.9 104 ug/L 70 - 127 74 - 126 trans-1.2-Dichloroethene 20.0 19.8 ug/L 99 Trichloroethene 20.0 19.3 ug/L 96 71 - 121 Vinyl chloride 20.0 20.5 ug/L 102 55 - 144

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 97 70 - 128 Dibromofluoromethane (Surr) 97 77 - 124 Toluene-d8 (Surr) 104 80 - 120 76 - 120 4-Bromofluorobenzene 98

Lab Sample ID: LCSD 460-908741/5

Matrix: Water

Analysis Batch: 908741

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

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1-Dichloroethene	20.0	19.7		ug/L		99	68 - 133	1	30
cis-1,2-Dichloroethene	20.0	21.2		ug/L		106	78 - 121	2	30
Tetrachloroethene	20.0	21.6		ug/L		108	70 - 127	4	30
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	74 - 126	3	30
Trichloroethene	20.0	19.3		ug/L		97	71 - 121	0	30
Vinyl chloride	20.0	20.7		ug/L		104	55 - 144	1	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 128
Dibromofluoromethane (Surr)	99		77 - 124
Toluene-d8 (Surr)	105		80 - 120

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Page 12 of 21

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

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

Lab Sample ID: LCSD 460-908741/5 Client Sample ID: Lab Control Sample Dup **Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 908741

LCSD LCSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene 101 76 - 120

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

Lab Sample ID: MB 460-909423/7 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 909423

MB MB

Analyte Result Qualifier RL **MDL** Unit D Analyzed Dil Fac Prepared 0.86 1,4-Dioxane Ū 2.0 ug/L 05/16/23 09:43 2.0

MB MB

Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac 4-Bromofluorobenzene 92 75 - 133 05/16/23 09:43

Lab Sample ID: LCS 460-909423/3 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 909423

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 1,4-Dioxane 5.00 5.34 107 57 - 124 ug/L

LCS LCS

Surrogate %Recovery Qualifier Limits

4-Bromofluorobenzene 96 75 - 133

Lab Sample ID: LCSD 460-909423/4 Client Sample ID: Lab Control Sample Dup **Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 909423

Spike LCSD LCSD **RPD** %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit 1.4-Dioxane 5.00 5.66 ug/L 113 57 - 124

LCSD LCSD

Surrogate %Recovery Qualifier Limits 75 - 133 4-Bromofluorobenzene 91

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Prep Type: Total/NA

QC Association Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - Off Site

Job ID: 240-184786-1

GC/MS VOA

Analysis Batch: 908741

Lab Sample ID 240-184786-1	Client Sample ID TRIP BLANK_164	Prep Type Total/NA	Matrix Water	Method 8260D	Prep Batch
240-184786-2	MW-158S_050323	Total/NA	Water	8260D	
MB 460-908741/9	Method Blank	Total/NA	Water	8260D	
LCS 460-908741/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-908741/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 909423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-184786-2	MW-158S_050323	Total/NA	Water	8260D SIM	
MB 460-909423/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-909423/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-909423/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

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Lab Chronicle

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Client Sample ID: TRIP BLANK_164

Date Collected: 05/03/23 00:00 Date Received: 05/05/23 08:00

Lab Sample ID: 240-184786-1

Matrix: Water

Batch Batch Dilution Batch Prepared **Prep Type** Method **Factor** Number Analyst or Analyzed Type Run Lab 05/12/23 15:14 Total/NA Analysis 8260D 908741 MZS EET EDI

Client Sample ID: MW-158S_050323 Lab Sample ID: 240-184786-2

Date Collected: 05/03/23 13:15 **Matrix: Water**

Date Received: 05/05/23 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	908741	MZS	EET EDI	05/12/23 17:48
Total/NA	Analysis	8260D SIM		1	909423	SZD	EET EDI	05/16/23 12:14

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Eurofins Cleveland

Accreditation/Certification Summary

Client: ARCADIS US Inc Job ID: 240-184786-1

Project/Site: Ford LTP - Off Site

Laboratory: Eurofins Edison

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-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

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£	Chair TestAmerica Laboratory location: Brighton 10448 Citati	Chain of Custody Record 10448 Citation Drive, Sulte 200 / Brighton, MI 48116 / 810-229-2763	9-2763	TestAmerica
Client Contact	-	NPDES RCRA Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Christina Weaver	Lab Contact: Mike DelMonico	TestAmerica Laboratories, Inc.
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 248-994-2240	Telenhane: 330-497-9396	
City/State/Zip: Novi, MI, 48377				1 of 1 COCs
Phone: 248-994-2240	F.mail: Kristoffer.hinskey(a)arcadis.com	American remaindent runc	Analyses	For lab use only
Project Name: Ford LTP Off-Site Project Number: 30167538, 402.04	Sampler Name: Lettico Ferrella Method of Shinnon Warrier			Walk-in client Lab sampling
PO # 30167538.402.04	Shipping/Tracking No:	e (Y/N)	80928	Job/SDG No:
	Matrix		Jouqe 8 208 2-DCE 3-DCE 85	
Sample Identification	Sample Date Sample Time Advenus Sediment Solid Advenus Sediment Solid	Compos	CIS-1,2-E	Sample Specific Notes / Special Instructions:
BLANK_ (64	6/01/2 1	1 N	× × × × × ×	1 Trip Blank
525050-2851-MM.	of 21:51 /s /b/	X	XXXXX	3 VOAs for 8260B
Page 1				
7 of 21				
		240-184786 Chain of Custody	MICHIGA	1-2
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	ritant Poison B Unknown	Sample Disposal (A fee may be assessed if samples are retained longer than I month) Return to Client Disposal By Lab Archive For Man	inples are retained longer than I month) Archive For Months	
S/QC Requirements & Comment 34450 BC & through Cadena at Itomalia@g requested.			Months	
Relinguishering FRRIN		18:30 Receivedby 60 6 6 8	Sough Comparisonelli	Date/Time: 3/23 (#3+
Relinquished by H	Company: Date Time; 5/4/23/	(035 Received by	Company	123/1035
Kelinguismed by:		10:40 Received Laboratory Dr. 10:40	Company:	Breating S.W.
G 62008 TestAmena Laboratores, Inc. All rights naseword				

Eurofins - Canton Sample Receipt Form/Narrative Login #: 184786
Barberton Facility
Client AyCaus Site Name Cooler unpacked by:
Cooler Received on 5.5.23 Opened on 5.5.23 Manually Bl
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other
Receipt After-hours: Drop-off Date/Time Storage Location
Eurofins Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Weffice Blue Ice Dry Ice Water None
1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN #°C Corrected Cooler Temp°C Corrected Cooler Temp°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity -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)? -Were tamper/custody seals intact and uncompromised? 3. Shippers' packing slip attached to the cooler(s)? 4. Did custody papers accompany the sample(s)? 5. Were the custody papers relinquished & signed in the appropriate place? 6. Was/were the person(s) who collected the samples clearly identified on the COC? 7. Did all bottles arrive in good condition (Unbroken)? 8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? 9. For each sample, does the COC specify preservatives (VN), # of containers (VN), and sample type of grab/comp (VN)? 10. Were correct bottle(s) used for the test(s) indicated? 11. Sufficient quantity received to perform indicated analyses? 12. Are these work share samples and all listed on the COC? 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 air bubbles >6 mm in any VOA vials? 16. Were tamper/custody seals on the toolet(s) signed & dated? Ves No VoAs Oil and Grease TOC Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC No Ph Strip Lot# HC208070 Ves No No No No No No No No No No
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
17. Was a LL Hg or Me Hg trip blank present?Yes No
Contacted PM by via Verbal Voice Mail Other
Concerning
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES
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)
Sample(s) were further preserved in the laboratory. Time preserved: Preservative(s) added/Lot number(s):
VOA Sample Preservation - Date/Time VOAs Frozen:

Login#: 184786

Cooler Description (Circle)	IR Gun#	Sample Receipt Mu Observed	Corrected	014
(Circle)	(0: 1)		Corrected	Coolant
	(Circle)	Temp °C	Temp °C	(Circle)
Eg Client Box Other	(Circle)	1.0	1.0	Wet ice Blue ice Dry ice
(EC) Client Box Other	IR GUN #: 20	1.8	18	Wet ice Blue ice Dry ice
EC Client Box Other	IR GUN #:			Wet Ice Slue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Wet ice Blue ice Dry ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet ice Blue ice Dry ice
EC Client Box Other	IR GUN #:			Water None Wet ice Sive Ice Dry ice
EC Client Box Other	IR GUN #:			Water None Water Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Water Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
	IR GUN #:			Water None Wet Ice Stue Ice Dry Ice
	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
	IR GUN #:			Water None
EC Client Sox Other	IR GUN #:		· · · · · · · · · · · · · · · · · · ·	Water None Wet ice Blue ice Dry ice
EC Client Box Other	IR GUN #:			Water None Wet ice Slue ice Dry ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Stue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN 6:			Water None Water Blue Ice Dry Ice
EC Client Box Other	IR GUN #:		-	Water None Wet Ice Stue Ice Dry Ice
EC Client Box Other				Water None Wet Ice Sive Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None
EC Client Box Other	IR GUN #:			Wefice Blue ice Dry ice Water None
EC Client Sox 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 Sive 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 #:			Wel ice Blue ice Dry ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
			☐ See Tem	perature Excursion Form

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

180 S. Van Buren Avenue Barberton, OH 44203

Eurofins Cleveland

Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Environment Testing

🔅 eurofins

	Carrie Carrie									5	Carrier Hacking 140(s).	.(0)		000 100		
Client Information (Sub Contract Lab)				DelM	DelMonico, Michael	ichael								240-16//89.1		
Client Contact:	Phone:			E-Mail:						State of Origin:	Origin:			Page:		
Shipping/Receiving				Mich	Michael.DelMonico@et.eurofinsus.com	onico@	et.eur	ofinsus	com	Michigan	Jan			Page 1 of 1		
Company: Eurofins Environment Testing Northeast,					Accreditations Required (See note):	ons Requ	uired (Se	e note):						Job #: 240-184786-1		
Address: 777 New Durham Road,	Due Date Requested: 5/18/2023	:pc						Analy	Analysis Requested	quest	<u>۾</u>			Preservation Codes:	odes: M - Hexane	
City. Edison	TAT Requested (days):	ays):											2000	B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State, Zip: NJ, 08817														D - Nitric Acid E - NaHSO4	G - Na2SO3 R - Na2S2O3 R - Na2S2O3	
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:					/ser								G - Amchlor H - Ascorbic Acid		
Email:	WO #:				(or	7.101								-		
Project Name: Ford LTP - Off Site	Project #: 24015353					10/ 800							ranieto		W - pH 4-5 Y - Trizma Z - other (specify)	
Site:	:#MOSS				SD (A								103 30	Other:		
			Sample	Watrix (W=water,	n/SA								andm.			
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Type (C=comp,	Smsolid, Omwaste/oil, BT=Tissue,	mone	S-00978							IN IRJOI		Special Instructions/Note:	
	X	X	Preserva	Preservation Code:												160
TRIP BLANK_164 (240-184786-1)	5/3/23	Eastern		Water		×								1		
MW-158S_050323 (240-184786-2)	5/3/23	13:15 Eastern		Water		×								8		
													8690			
													3603			
													4.39			
						-	-	-		-			-			ı

The stock of the strain of the Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont Possible Hazard Identification

Unconfirmed				Return To Client Disposal By Lab	Lab Archive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable	ble Rank: 2	dS	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment: TCALY	
Reinwarthe by:	3833	1333	ESECTAL L	Barry Received by Court of the	9	Company
Relinquished by:	Date/Time:		Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:		Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.:		TRIA	[RIG 2.12 (2)	Cooler Temperature(s) °C and Other Remarks:		

Client: ARCADIS US Inc Job Number: 240-184786-1

Login Number: 184786
List Source: Eurofins Edison
List Number: 2
List Creation: 05/09/23 01:20 PM

Creator: Armbruster, Chris

Creator: Armbruster, Chris		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

Residual Chlorine Checked.

DATA VERIFICATION REPORT



May 19, 2023

Kris Hinskey Arcadis Inc 10559 Citation Ave Suite 100 Brighton, MI 48116

CADENA project ID: E203631

Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater

Project number: 30167538.402.04 off-site

Event Specific Scope of Work References: Sample COC Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 184786-1 Sample date: 2023-05-03

Report received by CADENA: 2023-05-18

Initial Data Verification completed by CADENA: 2023-05-19

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, LCS/LCD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

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

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: E203631

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory Submittal: 184786-1

		Sample Name: Lab Sample ID: Sample Date:	TRIP BLA 2401847 5/3/202	7861	ļ		MW-158 2401847 5/3/202	- 7862	23	
				Report		Valid		Report		Valid
	Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	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-8260	<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 # 240-184786-1

CADENA Verification Report: 2023-05-19

Analyses Performed By: Eurofins North Canton, Ohio

Report # 49784R Review Level: Tier III Project: 30167538.402.02

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-184786-1 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 Collection		Ana	lysis
Sample ID	Lab ID	Matrix	Date	Parent Sample	voc	VOC SIM
TRIP BLANK_164	240-184786-1	Water	05/03/23		Х	
MW-158S_050323	240-184786-2	Water	05/03/23		X	X

ANALYTICAL DATA PACKAGE DOCUMENTATION

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

Items Reviewed	Rep	orted		mance ptable	Not
	No	Yes	No	Yes	Required
Sample receipt condition		Х		Х	
2. Requested analyses and sample results		X		X	
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 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 eptable	Not	
	No	Yes	No	Yes	Required	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (G	C/MS)					
Tier II Validation						
Holding times/Preservation		Х		Х		
Tier III Validation					-	
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: Dilip Kumar

SIGNATURE:

DATE: June 12, 2023

PEER REVIEW: Andrew Korycinski

DATE: June 21, 2023

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

Chain of Custody Record



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

Client Contact	Regula	ory program:		□ DW	Г	NPDE	S	RCR	A	Oth	ier						District consists.					
Company Name: Arcadis	Client Project	lanager: Kris l	Hinskey		Site	Conta	ct: Chr	istina Wei	ver			Lab (onta	ct: Mi	ke Del	Moni	co			stAmerica C No:	Laborato	ries, Inc
Address: 28550 Cabot Drive, Suite 500	Telephone: 248	004.2240			Tal	h	249.0	04.2240														
City/State/Zip: Novi, MI, 48377								94-2240				Telep	ohone:	: 330-	497-93					1 of	1 CC	OCs
Phone: 248-994-2240	Email: kristoff	er.hinskey@arc	adis.com			Analysis Turnsround Time					Analyses					For	For lab use only					
Project Name: Ford LTP Off-Site	Sampler Name		Fac	(if differ	ent from b											Wa	lk-in client			
	Lely	ica '	Ter	Cell	^ .	3 weeks												Lat	sampling			
Project Number: 30167538.402.04	Method of Ship	ment/Carrier:						1 week 2 days	2	9			ω			_	SIM			- sampling		
PO # 30167538.402.04	Shipping/Track	ing No:						I day	5	C/Grab		80g	8260B			260B	8260B		Job	Job/SDG No:		
				Matrix		Conta	ners &	Preservativ	8	ن ا	8260B	8260B				de 8	826					
				-					2	site	E 82	DCE	1,2-0	8092	809a	hlori	xane					
Sample Identification	Sample Date	Sample Time	Air Aqueous	Solid	Other: H2SO4	HNO3	NaOH	ZnAc NaOH Unpres	Other:	Comp	1,1-DCE	cis-1,2-DCE	Trans-1,2-DCE	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane				Specific No Linstruction	
TRIP BLANK_ (64	05/03/2		1			1	1		N	۱G	Х	Х	Х	Х	Х	X				1 Trip B	llank	
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Possible Hazard Identification				1 1	S	ample	Disposa	al (A fee n	my be asse	essed if	samp	es are	retai	ined lo	nger t	han i	month	,				
✓ Non-Hazard Flammable Skin Special Instructions/QC Requirements & Comments:	Irritant Poiso	n B	Unknown			Re	turn to	Client	Disp	osal By	y Lab			rchive				onths	_			
Sample Address: 24950 Black	st																					
Submit all results through Cadena at jtomalia@cade	naco.com. Cadena #	E203631																				
Reinquished by To Mil on	Company:	•	Date	Time: !			Recei	eived-hv:		; 1	70				Ic	- /1			Jes .			
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22008. TestAmenca Laboratories, Inc. All rights reserved. estAmenca & Design ¹⁶ are trademarks of TestAmenica Latx O

Eurofins Cleveland

180 S. Van Buren Avenue Barberton, OH 44203 **Chain of Custody Record**





Environment Testing

Phone: 330-497-9396 Fax: 330-497-0772												ىد	2.52						
Client Information (Sub Contract Lab) Client Contact:	Sampler:				eb PM: elMon	ico,	Mich	nael				Ca	rier Trac	king No(s):		COC No: 240-167789.1		
Shipping/Receiving	Phone:				-Mail: Iichael						s.com		te of Orig chigan	jin:			Page: Page 1 of 1		
Company: Eurofins Environment Testing Northeast,					Acc	credit	tations	Requir	red (See	e note):							Job #: 240-184786-1		
Address: 777 New Durham Road, ,	Due Date Requeste 5/18/2023	ed:								Analy	/sis F	Reque	sted				Preservation (M - Hexane	
City: Edison	TAT Requested (da	ays):															B - NaOH C - Zn Acetate D - Nitric Acid	N - None O - AsNaO2 P - Na2O4S	
State, Zip: NJ, 08817																	E - NaHSO4 F - MeOH	Q - Na2SO3 R - Na2S2O3	
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:				(9)		(lst)										G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodeca U - Acetone	ahydrate
Email:	WO #:				S OF	or No)	Short									913	I - Ice J - DI Water K - EDTA	V - MCAA W - pH 4-5	
Project Name: Ford LTP - Off Site	Project #: 24015353				19	0 30	VOCs (Short						ntainers	L - EDA	Y - Trizma Z - other (specif	ıfy)			
Site:	SSOW#:) gs							oj o	Other:					
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oi BT=Tissue A=Air)	Fleid Filters	Perform MS/N	8260D/5030C (N	8260D_SIM/5030C								Total Number	Special	Instructions/No	ote:
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TRIP BLANK_164 (240-184786-1) MW-158S_050323 (240-184786-2)	5/3/23	Eastern 13:15		Water	+	L	X	<u> </u>	-	+	-	-	+	+	\vdash	1			
MW-1363_030323 (240-164765-2)	5/3/23	Eastern		Water		H	X	X	+	+	H	-	+	-	++	6			
					+	H		\vdash	+	+	H	+	+	+	++				
						H		\forall		+		\dashv		+	++				
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Note: Since laboratory accreditations are subject to change, Eurofins Environme laboratory does not currently maintain accreditation in the State of Origin listed al accreditation status should be brought to Eurofins Environment Testing North Ce	bove for analysis/tests	s/matrix being	analyzed, the sa	amples mu	st be sh	ippe	d back	to the	Eurofin:	s Enviro	onment	Testing I	North Cer	ntral, LLC	laborator	y or othe	er instructions will	be provided. Any cha	nanges to
PossIble Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)							\Box_R	eturn	To Cli	ent		□ _{Disį}	osal B	i f samp y Lab	les are	7	ed longer tha nive For	n 1 month) Months	
	Primary Deliver	able Rank:	2			Spe	ecial	Instru	ctions	/QC R	Require	ements							
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Relinquished by:	Date/Time:			Company			Rece	ived by	r.		3.			Date	e/Time:			Company	
Relinquished by:	Date/Time:			Company			Rece	ived by	r.					Date	e/Time:			Company	
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No				, \	-			er Tem	perature	e(s) °C a	and Oth	er Rema	ks:						
		12	192	, 1 C	-	2	1	<u> </u>											

Client Sample Results

Client: ARCADIS US Inc Job ID: 240-184786-1 Project/Site: Ford LTP - Off Site

Client Sample ID: TRIP BLANK_164

Lab Sample ID: 240-184786-1 Date Collected: 05/03/23 00:00 **Matrix: Water**

Date Received: 05/05/23 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			05/12/23 15:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/12/23 15:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 15:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/12/23 15:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 15:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/12/23 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 128					05/12/23 15:14	1
Dibromofluoromethane (Surr)	100		77 - 124					05/12/23 15:14	1
Toluene-d8 (Surr)	102		80 - 120					05/12/23 15:14	1
4-Bromofluorobenzene	98		76 - 120					05/12/23 15:14	1

Client Sample ID: MW-158S_050323 Lab Sample ID: 240-184786-2

Date Collected: 05/03/23 13:15 Date Received: 05/05/23 08:00

Method: SW846 8260D S	SIM - Volatile Orga	anic Comp	ounds (GC/N	/IS)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/16/23 12:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		75 - 133					05/16/23 12:14	1

Analyte		Compounds Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/12/23 17:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/12/23 17:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/12/23 17:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/12/23 17:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/12/23 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 128		05/12/23 17:48	1
Dibromofluoromethane (Surr)	110		77 - 124		05/12/23 17:48	1
Toluene-d8 (Surr)	104		80 - 120		05/12/23 17:48	1
4-Bromofluorobenzene	112		76 - 120		05/12/23 17:48	1

Matrix: Water