

**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Kristoffer Hinskey ARCADIS US Inc 28550 Cabot Drive Suite 500 Novi, Michigan 48377 Generated 5/21/2023 11:08:38 PM

## JOB DESCRIPTION

Ford LTP - Off Site

## **JOB NUMBER**

240-185141-1

Eurofins Cleveland 180 S. Van Buren Avenue Barberton OH 44203





## **Eurofins Cleveland**

### Job Notes

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

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

Authorization

low

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Authorized for release by Michael DelMonico, Project Manager I <u>Michael.DelMonico@et.eurofinsus.com</u> (330)497-9396

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TEF

TEQ

TNTC

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

FT0ject/One. T	old LTF - OII Sile	
Qualifiers		3
GC/MS VOA Qualifier	Qualifier Description	4
U	Indicates the analyte was analyzed for but not detected.	
Glossary		5
Abbreviation	These commonly used abbreviations may or may not be present in this report.	6
¤	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	0
CNF	Contains No Free Liquid	ð
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	9
DL	Detection Limit (DoD/DOE)	4.0
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)	13
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	

#### Job ID: 240-185141-1

#### Laboratory: Eurofins Cleveland

#### Narrative

Job Narrative 240-185141-1

#### Receipt

The samples were received on 5/11/2023 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  $1.0^{\circ}$ C and  $1.2^{\circ}$ C

#### GC/MS VOA

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

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

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

### Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-185141-1	TRIP BLANK_59	Water	05/09/23 00:00	05/11/23 08:00
240-185141-2	MW-167S_050923	Water	05/09/23 13:41	05/11/23 08:00

### **Detection Summary**

Job ID: 240-185141-1

Lab Sample ID: 240-185141-1

Lab Sample ID: 240-185141-2

Client Sample ID: TRIP BLANK\_59

Client: ARCADIS US Inc

Project/Site: Ford LTP - Off Site

#### Client Sample ID: MW-167S\_050923

No Detections.

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### Client Sample ID: TRIP BLANK\_59

Date Collected: 05/09/23 00:00 Date Received: 05/11/23 08:00

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			05/19/23 13:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/19/23 13:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 13:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/19/23 13:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 13:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/19/23 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 128			-		05/19/23 13:57	1
Dibromofluoromethane (Surr)	120		77 - 124					05/19/23 13:57	1
Toluene-d8 (Surr)	101		80 - 120					05/19/23 13:57	1
4-Bromofluorobenzene	99		76 - 120					05/19/23 13:57	1

Job ID: 240-185141-1

## Lab Sample ID: 240-185141-1

Matrix: Water

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**8** 9

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#### Client Sample ID: MW-167S\_050923

Date Collected: 05/09/23 13:41 Date Received: 05/11/23 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			05/18/23 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		75 - 133			-		05/18/23 16:16	1
Method: SW846 8260D - Volati	ile 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			05/19/23 16:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/19/23 16:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 16:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/19/23 16:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 16:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/19/23 16:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 128			-		05/19/23 16:03	1
Dibromofluoromethane (Surr)	124		77 - 124					05/19/23 16:03	1
Toluene-d8 (Surr)	106		80 - 120					05/19/23 16:03	1
4-Bromofluorobenzene	105		76 - 120					05/19/23 16:03	1

5/21/2023

#### Lab Sample ID: 240-185141-2 Matrix: Water

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

#### Percent Surrogate Recovery (Acceptance Limits) DCA DBFM TOL BFB Lab Sample ID **Client Sample ID** (70-128) (77-124) (80-120) (76-120) 240-185141-1 TRIP BLANK\_59 110 99 120 101 240-185141-2 MW-167S\_050923 119 124 106 105 LCS 460-910178/4 Lab Control Sample 93 102 100 92 95 LCSD 460-910178/5 Lab Control Sample Dup 93 97 103 MB 460-910178/9 Method Blank 95 102 94 87 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)	13
240-185141-2	MW-167S_050923	96	
LCS 460-909931/4	Lab Control Sample	94	
LCSD 460-909931/12	Lab Control Sample Dup	96	
MB 460-909931/7	Method Blank	96	
Surrogate Legend			

BFB = 4-Bromofluorobenzene

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## Prep Type: Total/NA

Job ID: 240-185141-1

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

#### Matrix: Water Analysis Batch: 910178

Dil Fac
1
1
1
1
1
1
_

	MB	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 128		05/19/23 10:07	1
Dibromofluoromethane (Surr)	102		77 _ 124		05/19/23 10:07	1
Toluene-d8 (Surr)	94		80 - 120		05/19/23 10:07	1
4-Bromofluorobenzene	87		76 - 120		05/19/23 10:07	1

#### Lab Sample ID: LCS 460-910178/4 Matrix: Water Analysis Batch: 910178

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	20.0	16.0		ug/L		80	68 - 133	
cis-1,2-Dichloroethene	20.0	15.9		ug/L		79	78 - 121	
Tetrachloroethene	20.0	18.7		ug/L		94	70 - 127	
trans-1,2-Dichloroethene	20.0	16.3		ug/L		81	74 - 126	
Trichloroethene	20.0	16.6		ug/L		83	71 - 121	
Vinyl chloride	20.0	15.6		ug/L		78	55 - 144	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 128
Dibromofluoromethane (Surr)	102		77 - 124
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene	92		76 - 120

#### Lab Sample ID: LCSD 460-910178/5 Matrix: Water Analysis Batch: 910178

S	pike LCSD	LCSD			%Rec		RPD
Analyte Ad	ded Result	Qualifier U	Jnit D	%Rec	Limits	RPD	Limit
1,1-Dichloroethene	20.0 15.9	u	ıg/L	79	68 - 133	1	30
cis-1,2-Dichloroethene	20.0 16.4	u	ıg/L	82	78 - 121	3	30
Tetrachloroethene	20.0 19.7	u u	ıg/L	99	70 - 127	5	30
trans-1,2-Dichloroethene	20.0 16.8	u	ıg/L	84	74 - 126	3	30
Trichloroethene	20.0 16.9	u	ıg/L	84	71 - 121	1	30
Vinyl chloride	20.0 15.0	u	ıg/L	75	55 - 144	4	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 128
Dibromofluoromethane (Surr)	97		77 - 124
Toluene-d8 (Surr)	103		80 - 120

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

ug/L	78	55 - 144	

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

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**Client Sample ID: Method Blank** 

Prep Type: Total/NA

10

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

Lab Sample ID: LCSD 460-9 Matrix: Water Analysis Batch: 910178	10178/5							Clie	nt San	nple ID:	Lab Contro Prep T	l Samp ype: To	
	LCSD	LCS	D										
Surrogate	%Recovery	Qual	lifier	Limits									
4-Bromofluorobenzene	95			76 - 120									
lethod: 8260D SIM - Vol	atile Organic	: Co	mpoun	ds (GC/MS)									
Lab Sample ID: MB 460-909	931/7									Client S	ample ID: I	Method	Blan
Matrix: Water												ype: To	
Analysis Batch: 909931													
-		ΜВ	мв										
Analyte	R	esult	Qualifier	RL		MDL	Unit	ſ	D F	repared	Analyz	ed	Dil Fa
1,4-Dioxane		2.0	U	2.0		0.86	ug/L				05/18/23 (	08:26	
		MB	МВ										
Surrogate 4-Bromofluorobenzene	%Reco	very 96	Qualifier	Limits 75 - 133					F	Prepared	Analyz 		Dil Fa
	024/4								Client	t Comple			ompl
Lab Sample ID: LCS 460-909 Matrix: Water	931/4								Clien	t Sample	ID: Lab Co	ype: To	
Analysis Batch: 909931											Flep I	ype. io	
Analysis Batch. 500001				Spike	LCS	LCS					%Rec		
Analyte				Added	Result		fier	Unit	D	%Rec	Limits		
1,4-Dioxane				5.00	4.90			ug/L		98	57 - 124		
	LCS	LCS											
Surrogate	%Recovery	Qua	lifier	Limits									
4-Bromofluorobenzene	94			75 - 133									
Lab Sample ID: LCSD 460-9	09931/12							Clie	nt San	nple ID:	Lab Contro	I Samp	le Du
Matrix: Water											Prep T	ype: To	tal/N
Analysis Batch: 909931													
Analysis Datch. 303331				Spike		LCSD					%Rec		RP
-				Added	Result	Quali	fier	Unit	D	%Rec	Limits	RPD	Lim
Analyte			<u> </u>		1.6.						57 101		
Analyte				5.00	4.91			ug/L		98	57 - 124	0	3
Analyte		LCS			4.91			ug/L		98	57 _ 124	0	3
Analyte 1,4-Dioxane Surrogate	LCSD %Recovery				4.91			ug/L		98	57 _ 124	0	3

### GC/MS VOA

#### Analysis Batch: 909931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-185141-2	MW-167S_050923	Total/NA	Water	8260D SIM	
MB 460-909931/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-909931/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-909931/12	Lab Control Sample Dup	Total/NA	Water	8260D SIM	
nalysis Batch: 91017			<b></b>		
· ·	8 Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
Lab Sample ID		Prep Type Total/NA	Matrix Water	Method 8260D	Prep Batch
Lab Sample ID 240-185141-1	Client Sample ID				Prep Batch
Lab Sample ID 240-185141-1 240-185141-2	Client Sample ID TRIP BLANK_59	Total/NA	Water	8260D	Prep Batch
nalysis Batch: 91017 Lab Sample ID 240-185141-1 240-185141-2 MB 460-910178/9 LCS 460-910178/4	Client Sample ID TRIP BLANK_59 MW-167S_050923	Total/NA Total/NA	Water Water	8260D 8260D	Prep Batch

Matrix: Water

Matrix: Water

Lab Sample ID: 240-185141-1

Lab Sample ID: 240-185141-2

#### Client Sample ID: TRIP BLANK\_59 Date Collected: 05/09/23 00:00

Duto	0011001001	00/00/20 00.00
Date	Received:	05/11/23 08:00

Γ	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	910178	MZS	EET EDI	05/19/23 13:57

### Client Sample ID: MW-167S\_050923 Date Collected: 05/09/23 13:41

Date	Recei	ved:	05/11	/23	08:00
------	-------	------	-------	-----	-------

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	910178	MZS	EET EDI	05/19/23 16:03
Total/NA	Analysis	8260D SIM		1	909931	SZD	EET EDI	05/18/23 16:16

#### Laboratory References:

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

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### Accreditation/Certification Summary

Client: ARCADIS US Inc 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

**Eurofins Cleveland** 

Clinet Contast	Brighton	e 200 / Brighton, MI 48116	9.2763	PHILLEADER IN ENVIRONMENTAL FILBTING
Company Name: Arcadis	keguatory program:	NTDES KUKA Other		Tast America I about asian I an
Addament 19550 Caboo Baine Suita 200	Client Project Manager: Kris Hinskey	Site Contact: Christina Weaver	Lab Contact: Mike DelMonico	COC No:
VUULESS: 19550 C. 2001 101 146, 2006 200	Telephone: 248-994-2240	Telephone: 248-994-2240	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	V mailt. Leitetaffas hindus/Annovalis anna	Analysis intractand Time	A na 1.000	r 1 of 1 COCs
Phone: 248-994-2240	Cuman: Ar Istolice musice (a art adus com		200 STORE	For lab use only
Project Name: Ford LTP Off-Site	Sumpler Name: - Temelon	TAT if different from below 3 weeks 40 April 2 7 works		Walk-in client
Project Number: 30167538.402.04	riei	Tweek Z)		Lab sampling
PO# 30167538.402.04	Shipping/Tracking No:	\ Crap	85608	Job/SDG No:
Samale Identification	Variate Control of Con	1-DCE 8560 <u>о</u> шрозіс=С <u>о</u> шрозіс=С <u>о</u> шрозіс=С <u>о</u> пі <u>о</u> пі	s-1,2-DCE 8 rans-1,2-DCE CE 8260B CE 8260B de 8260B de 8260B de 8260B de 8260B de 8260B de 8260B de 926 de	Sample Specific Notes / Special Instructions:
C TRIP BLANK_59				1 Trip Blank
6 14W - 1675_050923	05/04/23 13411 6	L PGX	XXXXX X	3 VOAs for 8260B 3 VOAs for 8260B SIM
21		240-185141 Chain of Custody	of Custody	
Possible Hazard Identification	- Boiton B	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	ples are retained longer than 1 month)	
C Requirements & Comment (200) Shr K rough Cadena at jtomalia@ equested.	skinitritani i PoisonB Unknown RA Sedenaco.com. Cadena #E203631	Return to Client 💉 Disposal By Lab	Archive For Months	
Relinguisheddy Contace Ferrerin	Date	16-20 Received in Cold SI	o age contains a dis	Dated yes, 23 16:30
Reimquished by: Market Market Market	Company: EEM Date Time	1550 Received by UN	Never Company: ECNA Denoe Company:	Date Time: 5//0/23 /1550 Date Time: Date Time: Date Time: Date Time:
2/21/2 2/2010: Teadwares a Dauge Versenander A. M. 1990, malfwart accessores. Inc.				
202				

5/21/2023

Eurofins - Canton Sample Receipt Form/Narrative Login # : 185141
Client Arcadis Site Name Cooler unpacked by
Cooler Received on 5-11-23 Opened on 5-11-23 Jam toyk
FedEx: 1 <sup>st</sup> 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: Wet Ice Blue Ice Dry Ice Water None
1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # (CF 10.0 °C) Observed Cooler Temp °C Corrected Cooler Temp °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA checked for pH by
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No Receiving:
-Were tamper/custody seals intact and uncompromised?
3. Shippers' packing slip attached to the cooler(s)? VOAs Oil and Grease
4. Did custody papers accompany the sample(s)?
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
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 $(Y N)$ , # of containers $(Y N)$ , and sample type of grab/comp $(Y/N)$ ?
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? Yes (No)
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? Larger than this Vered Yes No NA 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?
Contacted PM Date by via Verbal Voice Mail Other
Concerning
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES D additional next page Samples processed by:
19. SAMPLE CONDITION
Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)
20. SAMPLE PRESERVATION
Sample(s) were further preserved in the laboratory.
Sample(s)
VOA Sample Preservation - Date/Time VOAs Frozen:

# Login #: 185141

5
8
9
13
14

<b>Cooler Description</b>	IR Gun #	Observed	Corrected	Coolant
(Circle)	(Circle)	Temp °C	Temp °C	(Circle) (Wetice Blue Ice Dry Ic
EC Client Box Oth		1.0	I.D	Water None
EC) Client Box Oth		1.2	1.2	Wet ice Blue ice Dry ic Water None
EC Client Box Oth	IR GUN #:			Wet ice Blue ice Dry ic Water None
EC Client Box Oth	IR GUN #:			Wet ice Blue ice Dry ice Water None
EC Client Box Oth	H IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Oth	IR GUŇ #:			Wetice Blue Ice Dry Ice
EC Client Box Oth	IP GUN A			Water None Wet ice Blue ice Dry ice
EC Client Box Oth	IP GUN A:			Water None Wet ice Blue ice Dry ice
	IR CHIN A:		*	Water None Wetice Blue ice Dry ice
EC Client Box Oth				Water None Wet ice Blue ice Dry ice
EC Client Box Oth	IR GUN #:			Water None Wellice Blue Ice Drylce
EC Client Box Oth				Water Hone
EC Client Box Oth				Wet ice Blue ice Dry ice Water None
EC Client Box Oth				Wet ice Blue ice Dry ice Water None
EC Client Box Oth	IR GUN #:			Wellice Bluelice Drylce Water None
EC Client Box Oth	IR GUN #:			Wet ice Blue ice Dry ice Water None
EC Client Box Oth	IR GUN 0;			Wet toe Blue toe Dry loe Water None
EC Client Box Oth	IR GUN #:			Wellice Bluelice Dryke Water None
EC Client Box Oth	IR GUN #:			Weilce Bluelce Drylce
EC Client Box Oth	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Oth	ID CITIN A.			Water None Wat Ice Blue Ice Dry Ice
EC Client Box Oth				Water None Wet Ice Blue Ice Dry Ice
				Water None Wet Ice Blue Ice Dry Ice
EC Client Box Oth				Water None Wet Ice Blue Ice Dry Ice
EC Client Box Oth	Br			Water None Wet ice Blue ice Dry ice
EC Client Box Oth				Water None
BC Client Box Oth				Wet ice Blue ice Dry ice Water None
EC Client Box Oth				Wet Ice Blue Ice Dry Ice Water None
EC Client Box Oth				Wefice Blue ice Dry ice Water None
EC Client Box Othe	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Oth	IR GUN #:			Wefice Blue ice Dry ice Water None
EC Client Box Oth	IR GUN #:			Wellice Sivelice Drylice
EC Client Box Oth	IR GUN A:		······	Water None. Wet ice Blue ice Dry ice
EC Client Box Oth	IR CHINA:			Water None Wet Ice Blue Ice Dry Ice
	IR CUM A			Water None Wellice Bluelice Drylice
EC Client Box Othe				Water None Wet Ice Blue Ice Dry Ice
EC Client Box Othe	M			Water None

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

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Chain of Custody Record



🔅 eurofins

Barberton, OH 44203 Phone: 330-497-9396 Fax: 330-497-0772						Environment Testing
Client Information (Sub Contract Lab)	Sampler:		Lab PM: DelMonico, Michael		Carrier Tracking No(s):	COC №: 240-167972.1
Client Contact: Shipping/Receiving	Phone:		E-Mail: Michael.DelMonico@et.eurofinsus.com	Øet.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,			Accreditations Required (See note):	luired (See note):		Job #: 240-185141-1
Address: 777 New Durtham Road,	Due Date Requested: 5/24/2023			Analysis Requested	quested	Preservation Codes: A - HCI
City: Edison State, Zip: N.I. 08817	TAT Requested (days):					B - NaOH N - None B - NaOH N - AsNaO2 C - Zn Acetate P - Na2O4S D - Mintc Acid Q - Na2O4S E - NaHSO4 D - Na2O3
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	P0 #:		36-2			
1	:# OM					I - Ice J - DI Water
Project Name: Ford LTP - Off Site	Project #: 24015353		10 89			K - EDTA Y - Trizma L - EDA Z - other (specify)
Site	SSOW#:					Other:
) Sample Identification - Client ID (Lab ID)	Sample Date Time	Sample ( Type ( (C=comp, B G=grab)	Matrix (Winwater, Sector) Sectorid, Granstoid, Granstoid, ArAt)			Special Instructions/Note:
H		Preservation Code:	Code: XX			X
TRIP BLANK_59 (240-185141-1)	5/9/23 Eastern		Water X			1
MW-167S_050923 (240-185141-2)	5/9/23 13:41 Eastern		Water X X			9
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory accreditation compliance upon our subcontract laboratory or other instructions will be provided. Any changes to laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC	vironment Testing North Central, LLC place listed above for analysis/tests/matrix being Vorth Central, LLC attention immediately.	as the ownership of analyzed, the sami f all requested accri	method, analyte & accreditation ples must be shipped back to the aditations are current to date, re	n compliance upon our subco ne Eurofins Environment Test etum the signed Chain of Cus	ntract laboratories. This sample shipn ing North Central, LLC laboratory or o tody attesting to said compliance to E	ment is forwarded under chain-of-custody. If the ther instructions will be provided. Any changes to curofins Environment Testing North Central, LLC.
Possible Hazard Identification Unconfirmed			Sample Dis	le Disposal ( A fee may be Return To Client	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client	tained longer than 1 month) Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank:	k: 2	Special Inst	Special Instructions/QC Requirements		
Empty kit Relinquished by:	Date:		Time:		Method of Shipment:	-edex
Relianization by	Date in the second		Company Received by	DIN DALICIN	Date/Time: 1212	23 10 30 Company
Rejnquisjidatur	Date/Time:	БU	Company Received by:	1	1	
Relinquished by:	Date/Time:	БО	Company Received by:	by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.: △ Yes △ No		T	L D , Q L - T C	Cooler Temperature(s) °C and Other Remarks	emarks:	
		1	14	11 12 13	7 8 9 10	2 3 4 5 6

5/21/2023

#### Client: ARCADIS US Inc

#### Login Number: 185141 List Number: 2

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	
Residual Chlorine Checked.	N/A	

Job Number: 240-185141-1

List Source: Eurofins Edison

List Creation: 05/12/23 03:15 PM

### **DATA VERIFICATION REPORT**



May 25, 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: 185141-1 Sample date: 2023-05-09 Report received by CADENA: 2023-05-25 Initial Data Verification completed by CADENA: 2023-05-25 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 <u>http://clms.cadenaco.com/index.cfm</u>.

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.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than $5x$ (or $10x$ for common lab 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: 185141-1

		Sample Name: Lab Sample ID: Sample Date:	TRIP BLA 2401852 5/9/202	_ 1411			MW-167 2401851 5/9/202	_ L412	23	
			_	Report		Valid	_	Report		Valid
	Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC										
<u>OSW-826</u>	<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	
<u>OSW-826</u>	<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 # 240-185141-1 CADENA Verification Report: 2023-05-25

Analyses Performed By: Eurofins North Canton, Ohio

Report # 49928R Review Level: Tier III Project: 30167538.402.02

### **SUMMARY**

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-185141-1 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_59	240-185141-1	Water	05/09/23		Х	
MW-167S_050923	240-185141-2	Water	05/09/23		Х	Х

#### DATA REVIEW

#### ANALYTICAL DATA PACKAGE DOCUMENTATION

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

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

#### **DATA REVIEW**

#### **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 HCI

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.

#### DATA REVIEW

#### 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 REVIEW

### DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260D/8260D-SIM		Reported		rmance ptable	Not Required
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (G	C/MS)				
Tier II Validation					
Holding times/Preservation		Х		X	
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		Х	
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:	Pertmit
DATE:	June 16, 2023

PEER REVIEW: Andrew Korycinski

DATE: June 19, 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

Company Name: Arcadis																						TestAmeric	a Labora	atories.
Address: 28550 Cabot Drive, Suite 500	Client Project Manager: Kris Hinskey					Site	ite Contact: Christina Weaver							1	Lab Contact: Mike DelMonico							COC No:		
	Telephone: 248-994-2240 Email: kristoffer.hinskey@arcadis.com						ephon	ie: 248	8-994-2	240					Telepl	hone:	330-4	97-93	96					
ity/State/Zip: Novi, MI, 48377							Analy	ysis Tu	urnard	und 1	Tme		II		_		_	А	nalys	es		1 of 1 C		
hone: 248-994-2240	Samular Manu						Land	Friend Bas	om below	-	T	-										Walk-in clier		-
Project Name: Ford LTP Off-Site	Sampler Mane: - Fenelon						10 day			veeks												Lab sampling		
roject Number: 30167538.402.04	Method of Ship	oment/Carrier:							1 w 2 d			E	9			8			_	SIM				
°O # 30167538.402.04	Shipping/Tracl	king No:				1		1	Id	ау		mple (Y / N)	C / Grab=G	B	3260B	E 8260B			82608	8260B SIM		Job/SDG No:		
				Matr	ix	-		tainers	& Pres	Γ		d Sam		E 8260B	-DCE	1,2-DC	2608	8260B	hloride	xane (			-	
Sample Identification	Sample Date	Sample Time	Air Aqueous	Sediment	Solid Other:	H2SO4	HN03	HCI	ZAAC/	Unpres	Other:	Filtere	Composite	1.1-DCE	cis-1,2-DCE 8260B	Trans-1,2-DCE	PCE 8260B	TCE 82	Vinyl Chloride	1,4-Dioxane			Specific ! al Instruct	
TRIP BLANK_ 59	05/00/23		1					1		Τ		N	G	X	X	Х	Х	х	Х			1 Trip	Blank	
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					-	+		-	+	+	1-			+	-+				-					
Possible Hazard Identification						+.		o Dien	anal (															_
Non-Hazard Flammable Skin Irrita	ant 🗆 Poise	on B	Unknow	'n					to Cli		may be a		sal By		es are		rchive		nan I	Months				
special Instructions/OC Requirements & Comments: Sample Address: 20 SAYK RA Submit all results through Cadena at jtomalia@cadenacc .evel IV Reporting requested.	.com. Cadena #	Æ203631																						
Relinquished by:	AME A	dis	Da	te/Time	4/2:	5 /	1-	۸D	eccive	J Jy:	ñl	n6	1 (	b	ral	1		Confe	any	idis		Date I une:	/73	16
Relinquished by:	Company:		Da	te Time	/23	TI	0		eceive	d by:	1	Ĩ	V	N	Tag N		-	Comp		EE	1A	Date/Time:	23 /	1,5
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#### Eurofins Cleveland 180 S. Van Buren Avenue

Barberton, OH 44203

Page 20 of 21

5/21/2023

Chain of Custody Record



eurofins Environment Testing

Phone: 330-497-9396 Fax: 330-497-0772																			
Client Information (Sub Contract Lab)	Sampler:				PM: Monic	co, Mi	chael					Carrier Tracking No(s):						COC No: 240-167972.1	
Client Contact: Shipping/Receiving	Phone:		ael.DelMonico@et.eurofinsus.com Michigan Accreditations Required (See note):								in:	Page 1 of 1							
Company: Eurofins Environment Testing Northeast,					Accr	editatio	ns Rec	quired (\$	See no	ote):								Job #: 240-185141-1	
Address: 777 New Durham Road,	Due Date Requeste 5/24/2023	ed:							An	alysi	s Re	aues	sted					Preservation Code	es: M - Hexane
City: Edison	TAT Requested (da	ays):								T	T			Τ	Τ			B - NaOH	N - None O - AsNaO2 P - Na2O4S
State, Zip: NJ, 08817																	T Na	E - NaHSOA	Q - Na2SO3 R - Na2S2O3
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:				Q	ist)												G - Amchlor	S - H2SO4 T - TSP Dodecahydrate U - Acetone
Email:	WO #:				8 DK NO	(MOD) VOCs (Short List)											510	J - DI Water	V - MCAA W - pH 4-5
Project Name: Ford LTP - Off Site	Project #: 24015353				le (Yes												containe		Y - Trizma Z - other (specify)
Site:	SSOW#:				8										ð	Other:			
		Sample	Sample Type (C=comp,	Watrix (W=water, S=solid, O=waste/oil, BT=Tissue,		8260D/5030C (M	8260D_SIM/5030C										<b>Total Number</b>		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab)	A-A+)		826	826							_		- Heres		Special Ins	tructions/Note:
	~	$\times$	Preservat		X	×				3	1						X		
TRIP BLANK_59 (240-185141-1)	5/9/23	Eastern		Water	$\square$	X											1		
MW-167S_050923 (240-185141-2)	5/9/23	13:41 Eastern		Water		×	×			_		-		_	+	-	6		
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Note: Since laboratory accreditations are subject to change, Eurofins Environmer laboratory does not currently maintain accreditation in the State of Origin listed at accreditation status should be brought to Eurofins Environment Testing North Ce	ove for analysis/tests	s/matrix being a	analyzed, the sa	amples mus	t be ship	pped ba	ck to th	he Euro	ofins E	nvironm	ent Tes	ting No	orth Cen	tral. LL	C labo	ratory o	r othe	er instructions will be pr	ovided. Any changes to
Possible Hazard Identification					1	Samp	le Dis	sposa	I(A	fee ma	ay be	asse	ssed i	fsan	ples	are re	tain	ed longer than 1	month)
Unconfirmed							Retu	n To	Clien	t		Dispo	sal By	Lab			Arch	hive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank: :	2		5	Specia	al Inst	ructio	ns/Q	C Req	uirem	ents:							
Empty Kit Relinquished by:		Date:			Tim	e:							Metho	d of Sh	nipment	1	-c	dex	
Reinquished by:		31	710	PE			ceived	31	0	his	ملذ	~	_	1	ate/Tim	21	22	5 10.30	Company
regnquispeatur.	Date/Time:			Company		Re	ceived	by:	-					D	ate/Tim	ie:			Company
Relinquished by:	Date/Time:		C	Company		Re	ceived	by:						D	ate/Tim	e:			Company
Custody Seals Intact: Custody Seal No.:				1.0						°C and		Remark	s:						
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### Client Sample ID: TRIP BLANK\_59

Date Collected: 05/09/23 00:00 Date Received: 05/11/23 08:00

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			05/19/23 13:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/19/23 13:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 13:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/19/23 13:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 13:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/19/23 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)			70 - 128			-		05/19/23 13:57	1
Dibromofluoromethane (Surr)	120		77 - 124					05/19/23 13:57	1
Toluene-d8 (Surr)	101		80 - 120					05/19/23 13:57	1
4-Bromofluorobenzene	99		76 - 120					05/19/23 13:57	1

Job ID: 240-185141-1

## Lab Sample ID: 240-185141-1

Matrix: Water

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**8** 9

**Eurofins Cleveland** 

#### Client Sample ID: MW-167S\_050923

Date Collected: 05/09/23 13:41 Date Received: 05/11/23 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			05/18/23 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		75 - 133			-		05/18/23 16:16	1
Method: SW846 8260D - Volati	le Organic Comp	ounds by G	C/MS						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/19/23 16:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/19/23 16:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 16:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/19/23 16:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/19/23 16:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/19/23 16:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)			70 - 128			-		05/19/23 16:03	1
Dibromofluoromethane (Surr)	124		77 - 124					05/19/23 16:03	1
Toluene-d8 (Surr)	106		80 - 120					05/19/23 16:03	1
4-Bromofluorobenzene	105		76 - 120					05/19/23 16:03	1

5/21/2023

Job ID: 240-185141-1

#### Lab Sample ID: 240-185141-2 Matrix: Water