

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kristoffer Hinskey ARCADIS US Inc 28550 Cabot Drive Suite 500 Novi, Michigan 48377 Generated 8/19/2023 10:39:13 AM

JOB DESCRIPTION

Ford LTP - Off Site

JOB NUMBER

240-189770-1

Eurofins Cleveland 180 S. Van Buren Avenue Barberton OH 44203





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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

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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)

Qualifiers		3
GC/MS VOA Qualifier	Qualifier Description	Λ
U	Indicates the analyte was analyzed for but not detected.	4
Glossany		5
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤ X D	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R		
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	8
CNF	Contains No Free Liquid	
DER Dil Fac	Duplicate Error Ratio (normalized absolute difference)	9
DIFAC	Dilution Factor 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)	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: 240-189770-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-189770-1

Case Narrative

Receipt

The samples were received on 8/9/2023 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 2.7°C and 4.4°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 CLE
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	EET CLE
5030C	Purge and Trap	SW846	EET CLE

Protocol References:

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

Laboratory References:

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-189770-1	TRIP BLANK_137	Water	08/07/23 00:00	08/09/23 08:00
240-189770-2	MW-178S_080723	Water	08/07/23 13:00	08/09/23 08:00

Eurofins Cleveland 8/19/2023

Detection Summary

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

Client Sample ID: TRIP BLANK_137

No Detections.

Client Sample ID: MW-178S_080723

No Detections.

Job ID: 240-189770-1

Lab Sample ID: 240-189770-1

Lab Sample ID: 240-189770-2

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Client Sample ID: TRIP BLANK_137

Date Collected: 08/07/23 00:00 Date Received: 08/09/23 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			08/16/23 16:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/16/23 16:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/16/23 16:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/16/23 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137			-		08/16/23 16:22	1
4-Bromofluorobenzene (Surr)	94		56 _ 136					08/16/23 16:22	1
Toluene-d8 (Surr)	93		78 - 122					08/16/23 16:22	1
Dibromofluoromethane (Surr)	116		73 - 120					08/16/23 16:22	1

8/19/2023

Lab Sample ID: 240-189770-1 Matrix: Water

Client Sample ID: MW-178S_080723

Date Collected: 08/07/23 13:00 Date Received: 08/09/23 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			08/10/23 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 120			-		08/10/23 15:43	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			08/16/23 16:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/16/23 16:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/16/23 16:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/16/23 16:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		62 - 137			-		08/16/23 16:45	1
4-Bromofluorobenzene (Surr)	88		56 - 136					08/16/23 16:45	1
Toluene-d8 (Surr)	96		78 - 122					08/16/23 16:45	1
Dibromofluoromethane (Surr)	108		73 - 120					08/16/23 16:45	1

8/19/2023

Job ID: 240-189770-1

Lab Sample ID: 240-189770-2 Matrix: Water

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

Percent Surrogate Recovery (Acceptance Limits) DCA BFB TOL DBFM Lab Sample ID **Client Sample ID** (62-137) (56-136) (78-122) (73-120) 240-189770-1 TRIP BLANK_137 107 94 93 116 240-189770-2 MW-178S_080723 103 88 96 108 240-189771-I-3 MSD Matrix Spike Duplicate 101 97 98 104 240-189771-L-3 MS Matrix Spike 97 92 95 103 LCS 240-584050/4 Lab Control Sample 101 100 101 100 MB 240-584050/7 Method Blank 99 104 96 105 Surrogate Legend DCA = 1,2-Dichloroethane-d4 (Surr) BFB = 4-Bromofluorobenzene (Surr) TOL = Toluene-d8 (Surr) DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

			Percent Surrogate Recovery (Acceptance Limits)
		DCA	
Sample ID	Client Sample ID	(66-120)	
189770-2	MW-178S_080723	91	
240-583475/5	Lab Control Sample	97	
240-583475/7	Method Blank	91	

Surrogate Legend

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

Job ID: 240-189770-1

Prep Type: Total/NA

Prep Type: Total/NA

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

Matrix: Water Analysis Batch: 584050

I	ИВ	мв							
Analyte Res	ult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/16/23 13:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/16/23 13:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 13:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/16/23 13:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 13:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/16/23 13:15	1

	МВ	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		08/16/23 13:15	1
4-Bromofluorobenzene (Surr)	96		56 - 136		08/16/23 13:15	1
Toluene-d8 (Surr)	99		78 - 122		08/16/23 13:15	1
Dibromofluoromethane (Surr)	105		73 - 120		08/16/23 13:15	1

Lab Sample ID: LCS 240-584050/4 Matrix: Water Analysis Batch: 584050

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	25.0	30.5		ug/L		122	63 - 134	
cis-1,2-Dichloroethene	25.0	27.4		ug/L		110	77 - 123	
Tetrachloroethene	25.0	28.8		ug/L		115	76 - 123	
trans-1,2-Dichloroethene	25.0	28.3		ug/L		113	75 - 124	
Trichloroethene	25.0	28.9		ug/L		116	70 - 122	
Vinyl chloride	12.5	12.7		ug/L		101	60 - 144	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		62 - 137
4-Bromofluorobenzene (Surr)	100		56 - 136
Toluene-d8 (Surr)	101		78 - 122
Dibromofluoromethane (Surr)	100		73 - 120

Lab Sample ID: 240-189771-I-3 MSD Matrix: Water Analysis Batch: 584050

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1-Dichloroethene	1.0	U	25.0	28.6		ug/L		115	56 - 135	6	26
cis-1,2-Dichloroethene	1.0	U	25.0	26.8		ug/L		107	66 - 128	5	14
Tetrachloroethene	1.0	U	25.0	27.5		ug/L		110	62 - 131	3	20
trans-1,2-Dichloroethene	1.0	U	25.0	26.7		ug/L		107	56 - 136	1	15
Trichloroethene	1.0	U	25.0	28.1		ug/L		112	61 - 124	4	15
Vinyl chloride	1.0	U	12.5	12.8		ug/L		102	43 - 157	0	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	98		78 - 122

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Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Job ID: 240-189770-1

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

Matrix: Water	-I-3 MSD								Clien	it Sa	imple ID	: Matrix Spike D Prep Type: ⁻	
Analysis Batch: 584050													
	MSD	MSD)										
Surrogate	%Recovery			Limits									
Dibromofluoromethane (Surr)		Quu		73 - 120									
· · · · · · · · · · · · · · · · · · ·													
Lab Sample ID: 240-189771-	-L-3 MS										Client	Sample ID: Matr	ix Spik
Matrix: Water												Prep Type: 7	Fotal/N
Analysis Batch: 584050													
	Sample	Sam	ple	Spike	MS	MS						%Rec	
Analyte	Result		lifier	Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
1,1-Dichloroethene	1.0	U		25.0	27.0			ug/L			108	56 - 135	
cis-1,2-Dichloroethene	1.0	U		25.0	25.4			ug/L			102	66 - 128	
Tetrachloroethene	1.0	U		25.0	26.8			ug/L			107	62 - 131	
trans-1,2-Dichloroethene	1.0	U		25.0	26.5			ug/L			106	56 - 136	
Trichloroethene	1.0	U		25.0	27.0			ug/L			108	61 - 124	
Vinyl chloride	1.0	U		12.5	12.7			ug/L			102	43 - 157	
	MS	ме											
Surrogate	%Recovery	Qua	lifior	Limits									
1,2-Dichloroethane-d4 (Surr)	<u>97</u>	Qua		62 - 137									
4-Bromofluorobenzene (Surr)	92			56 - 136									
Toluene-d8 (Surr)	95			78 - 122									
Dibromofluoromethane (Surr)	103			73 - 120									
lethod: 8260D SIM - Vol	athe organic	, 00	mpoun									emple ID: Methe	
Lab Sample ID: MB 240-583	475/7										Client S	ample ID: Metho Prep Type: ⁻	
Lab Sample ID: MB 240-583 Matrix: Water	475/7										Client S	Prep Type: ⁻	
Lab Sample ID: MB 240-583 Matrix: Water	475/7	МВ	мв								Client S		
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475			MB Qualifier	RL		MDL	Unit		D		Client S		Fotal/N/
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 ^{Analyte}				<u></u>			Unit ug/L					Prep Type: ⁻	Total/N/ Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 ^{Analyte}		esult 2.0	Qualifier U						_ <u>D</u> _			Prep Type:	Total/N/ Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane	R(2.0 MB	Qualifier U MB	2.0					<u> </u>	Pi	repared	Analyzed 08/10/23 10:41	Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate		2.0 MB	Qualifier U	2.0					_ <u>D</u> _	Pi		Analyzed 08/10/23 10:41 Analyzed	Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr)	R(2.0 MB	Qualifier U MB	2.0					_ D _	Pi	repared	Analyzed 08/10/23 10:41	Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr)	Reco	2.0 MB	Qualifier U MB	2.0						Pi Pi	repared repared	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41	Total/N/ Dil Fa Dil Fa
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583	Reco	2.0 MB	Qualifier U MB	2.0						Pi Pi	repared repared	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 UB/10/23 10:41 ID: Lab Control	Total/N/ Dil Fa Dil Fa Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583 Matrix: Water	Reco	2.0 MB	Qualifier U MB	2.0						Pi Pi	repared repared	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41	Total/N/ Dil Fa Dil Fa Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583 Matrix: Water	Reco	2.0 MB	Qualifier U MB	2.0	LCS		ug/L			Pi Pi	repared repared	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 UB/10/23 10:41 ID: Lab Control	Total/N/ Dil Fa Dil Fa Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583 Matrix: Water Analysis Batch: 583475	Reco	2.0 MB	Qualifier U MB	2.0		0.86	ug/L	Unit		Pi Pi	repared repared	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 ID: Lab Control Prep Type:	Total/N/ Dil Fa Dil Fa Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583 Matrix: Water Analysis Batch: 583475 Analyte	Reco	2.0 MB	Qualifier U MB	2.0	LCS Result 9.90	0.86	ug/L	Unit ug/L		Pı Pi ient	repared repared Sample	Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 ID: Lab Control Prep Type: %Rec	Total/N/ Dil Fa Dil Fa Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane Surrogate	Rr %Reco 3475/5	esult 2.0 MB very 91	Qualifier U MB Qualifier	2.0	Result	0.86	ug/L			Pı Pi ient	repared repared Sample %Rec	Prep Type: Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 ID: Lab Control Prep Type: %Rec Limits	Dil Fau Dil Fau Dil Fau Sample
Lab Sample ID: MB 240-583 Matrix: Water Analysis Batch: 583475 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-583 Matrix: Water Analysis Batch: 583475 Analyte	Reco	LCS	Qualifier U MB Qualifier	2.0	Result	0.86	ug/L			Pı Pi ient	repared repared Sample %Rec	Prep Type: Analyzed 08/10/23 10:41 Analyzed 08/10/23 10:41 ID: Lab Control Prep Type: %Rec Limits	Dil Fac

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GC/MS VOA

Analysis Batch: 583475

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
240-189770-2	MW-178S_080723	Total/NA	Water	8260D SIM	
MB 240-583475/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-583475/5	Lab Control Sample	Total/NA	Water	8260D SIM	
Analysis Batch: 5840	50				

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
240-189770-1	TRIP BLANK_137	Total/NA	Water	8260D	
240-189770-2	MW-178S_080723	Total/NA	Water	8260D	
MB 240-584050/7	Method Blank	Total/NA	Water	8260D	
LCS 240-584050/4	Lab Control Sample	Total/NA	Water	8260D	
240-189771-I-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	
240-189771-L-3 MS	Matrix Spike	Total/NA	Water	8260D	

Client Sample ID: TRIP BLANK_137 Lab Sample ID: 240-189770-1 Date Collected: 08/07/23 00:00 Matrix: Water Date Received: 08/09/23 08:00 Dilution Batch Batch Batch Prepared Prep Type Туре Method Run Factor Number Analyst Lab or Analyzed Total/NA 8260D 584050 LEE EET CLE 08/16/23 16:22 Analysis 1 Client Sample ID: MW-178S_080723 Lab Sample ID: 240-189770-2 Date Collected: 08/07/23 13:00 Matrix: Water Date Received: 08/09/23 08:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	584050	LEE	EET CLE	08/16/23 16:45
Total/NA	Analysis	8260D SIM		1	583475	MRL	EET CLE	08/10/23 15:43

Laboratory References:

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

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Accreditation/Certification Summary

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

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
California	State	2927	02-27-24	
Seorgia	State	4062	02-27-24	5
linois	NELAP	200004	07-31-24	
owa	State	421	06-01-25	
Kentucky (UST)	State	112225	02-28-24	
Kentucky (WW)	State	KY98016	12-31-23	
<i>l</i> ichigan	State	9135	02-27-24	
<i>l</i> innesota	NELAP	039-999-348	12-31-23	8
/linnesota (Petrofund)	State	3506	08-01-23 *	
lew Jersey	NELAP	OH001	07-01-24	C
lew York	NELAP	10975	04-02-24	~
Dhio	State	8303	02-27-24	
Dhio VAP	State	ORELAP 4062	02-27-24	
Dregon	NELAP	4062	02-27-24	
Pennsylvania	NELAP	68-00340	08-31-24	
exas	NELAP	T104704517-22-17	08-31-23	
/irginia	NELAP	460175	09-14-23	
Vest Virginia DEP	State	210	12-31-23	_

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

÷	Chain TestAmerica Laboratory location: Brighton 10448 Citatic	Chain of Custody Record 10448 Citation Drive, Suite 2007 Brighton, MI 48116 7810-229-2763	0-229-2763	
Client Contact	Regulatory program:	NPDES RCRA 0	Other	
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Christina Weaver	Lab Contact: Mike DetMonico	TestAmerica Laboratories, Inc. COC No:
Address: 26530 Capat Drive, Suite Suo	Telephone: 248-994-2240	Telephone: 248-994-2240	Telephone: 330-497-9396	
City/State/Zap: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	1 of 1 COCs For lab use only
Phone: 248-994-2240	Sampler Name:	TAT if different from below		Walk-in client
Project Number: 30167538.402.04	Set we well	((Lab sampling
PO# 30167538.402.04	Shipping/Tracking No:	-	8560D E 8560C 560D	Job/SDG No:
Sample Identification	Sample Sodiment Sodiment Sodiment Sodiment Sodiment Sodiment Sodiment Sodiment	Composite-C Effected Samp Universite Macon HCC HXOH RXOH HCC HXOH HXOJ C HXOH	1, 1-DCE 8260 crs-1, 2-DCE 8260D TCRNs-1, 2-DCE TCE 8260D TCE 8260D TCE 8260D TCE 8260D TCE 8260D TCE 8260D	Sample Specific Notes / Special Instructions:
V TRIP BLANK_ 13.7	ł	N G	× × × × ×	1 Trip Blank
~ MW-1785_080723	8/7/23/300 6	6 NG	X X X X X	3 VOAs for 8260D 3 VOAs for 8260D SIM
	240-189770 Chain of Custody	in of Custody	MUC	HIGAN
				061
Possible Hazard Identification Possible Hazard Identification Possible Hazard Possible Hazard Possible Intritant Possible	ritant Poisson B Unknown	Sample Disposal (A fee may be assessed if samples are Return to Client Disposal Rv1 ab	if samples are retained longer than 1 month) No 18 Archive For	
VOC Requirements & Comment しちり ひちちくいい through Cadena at Itomalia(a requested.		neo-deva		
Relinquished by Church	Company: Control Bare Time 3/0	700 Received by: Cold S.	Storage Company Al roud is	Date/Time: $\beta/23/\partial7c0$
Relinquished by: Burner Rund	Date/Time Bate/Time: Date/Time:	Level -	Company:	00
Cook Technesis Lectenses, cr. 41 split reserved Relificancia Electron Services of Pelificancial Lacordons, hc.				

8/19/2023

Eurofins - Cleveland Sample Receipt Form/Narrative Login # : Barberton Facility
Client Arcadis Site Name Michican Cooler unpacked by:
Chem She Hame She Hame
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: Wet Ice Blue Ice Dry Ice Water None
1. Cooler temperature upon receipt 🛛 See Multiple Cooler Form
IR GUN # (CF °C) Observed Cooler Temp °C Corrected Cooler Temp °C
 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity
17. Was a LL Hg or Me Hg trip blank present?Yes No
Contacted PM Date by via Verbal Voice Mail Other
Concerning
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES U 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 # : _

5 6 7

14

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN D: 20	3.8	AA	Wet ice Blue ice Dry
EC Client Box Other		21	2.7	Wet Ice Blue Ice Dry
EC Client Box Other	IR GUN #:		(X]	Wet Ice Blue Ice Dry I Water None
EC Client Box Other	IR GUN #:			Wet ice Blue ice Dry I Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry I Water None
EC Client Box Other	IR GUN #:			Wet ice Blue ice Byl Water None
EC Client Box Other	IR GUN 4:			Wet ice Dive ice Dry i
EC Client Box Other	P GUN A			Water None Wet ice Blue ice Dry i
EC Client Box Other				Water None Wellice Bluelice Dryk
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EC Client Box Other				Water None Wet ice Blue ice Dry k
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EC Client Box Other	IR GUN #:			Water None Wet ice Dive Ice Dry Ic
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EC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ic
EC Client Box Other	IR GUN 6:			Water None Wet ice Dive ice Dry ic
	IR GUN #:			Water None Wet Ice Blue Ice Dry Ic
	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
EC Client Box Other	IR GUN #:			Water None Wet ice Nue ice Dry ice
BC Client Box Other	IR GUN #:			Water None Wellice Divelice Drylo
EC Client Box Other	IR GUN #:			Water None Wet ice Blue ice Dry ice
C Client Box Other	IR GUN #:			Water None Wet Ice Stue Ice Dry Ice
IC Client Box Other	IR GUN #:			Water None Wet Ice Blue Ice Dry Ice
C Client Box Other	IR GUN #:			Water None Wet Ice Sive Ice Dry Ice
C Client Box Other	IR GUN #:			Water None Wet ice Blue ice Dry ice
C Client Box Other	IR GUN #:			Water None Wellice Bluelice Drylce
C Client Box Other				Water None Wet Ice Blue Ice Dry Ice
C Client Box Other	IR GUN #:			Water None
C Client Box Other	IR GUN #:			Wellice Bluelice Drylice Water None
C Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

DATA VERIFICATION REPORT



August 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: 189770-1 Sample date: 2023-08-07 Report received by CADENA: 2023-08-19 Initial Data Verification completed by CADENA: 2023-08-19 Number of Samples:2 Sample Matrices:Water Test Categories:GCMS VOC Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

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

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

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <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.
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: 189770-1

		Sample Name: TRIP BLANK_137 Lab Sample ID: 2401897701 Sample Date: 8/7/2023			,	MW-178S_080723 2401897702 8/7/2023					
				Report		Valid		Report		Valid	
	Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	
GC/MS VOC											
<u>OSW-826</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 # 240-189770-1 CADENA Verification Report: 2023-08-19

Analyses Performed By: Eurofins Cleveland Barberton, Ohio

Report # 51101R Review Level: Tier III Project: 30167538.402.02

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-189770-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) include a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Lab ID Matrix Sample		Parent Sample	Analysis			
Sample ID	Labib	INIALITA	Collection Date		VOC	VOC SIM		
TRIP BLANK_137	240-189770-1	Water	08/07/2023		Х			
MW-178S_080723	240-189770-2	Water	08/07/2023		Х	X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

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

	Items Reviewed	Rep	orted	Perfor Accep	mance otable	Not Required
		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		X	
6.	Sample collection date		Х		Х	
7.	Laboratory sample received date		Х		X	
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	

ORGANIC ANALYSIS INTRODUCTION

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

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

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

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

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

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

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

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

All samples were analyzed within the specified holding time criteria.

2. Mass Spectrometer Tuning

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

System performance and column resolution were acceptable.

3. Calibration

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

3.1 Initial Calibration

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

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

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

3.2 Continuing Calibration

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

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

4. Internal Standard Performance

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

All internal standard responses were within control limits.

5. Field Duplicate Analysis

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

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

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	Rep	orted	Perfo Acce	Not Required	
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (G	iC/MS)				
Tier II Validation					
Holding times/Preservation		Х		Х	
Tier III Validation					1
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		X	
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	

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

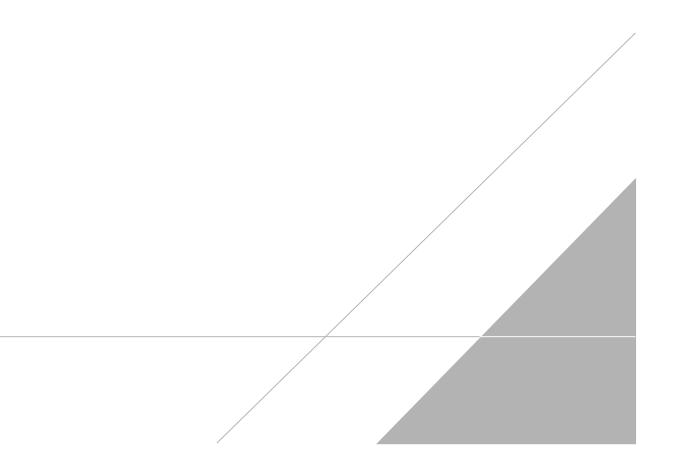
VALIDATION PERFORMED BY:	Bindu Sree M B
SIGNATURE:	BASHMB
DATE:	September 11, 2023

PEER REVIEW: Andrew Korycinski

DATE: September 14, 2023

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS



Chain of Custody Record

TestAmericc

THE LEADER IN ENVIRO

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

ompany Name: Arcadis							_		S		RC			Oth	1											TestAmerica Laboratories,
ddress: 28550 Cabot Drive, Suite 500	Client Project								Lab Contact: Mike DelMonico Telephone: 330-497-9396							COC No:										
	Telephone: 248																									
ity/State/Zip: Novi, M1, 48377	Email: kristoff	fer.hinskey@arc	adis.c	:om		-	- A	nalys	ls Tur	narou	und	l'ime	-	1	-	_			A	nalys	es	-			-	1 of 1 COCs For lab use only
hone: 248-994-2240													1													
roject Name: Ford LTP Off-Site	Sampler Name	ii a Av	-				IAT	if diffen	eni from	3 we	eeks	L	- 10													Walk-in client
		urner					10	day	1.	2 w	eeks															Lab sampling
roject Number: 30167538.402.04	Method of Ship	ment/Carrier:							-	1 wi 2 da			Z	9			0				SIM					A SULLEY THE REAL
0 # 30167538.402.04	Shipping/Track	king No:							F	1 da			Sample (Y / N)	C / Grab=G	0	8260D	E 8260D			8260D	8260D					Job/SDG No:
					atrix			Conta	iners ð	k Prese	ervat	lives		1e	E 8260D	DCE 8	.2-DC	60D	60D	loride	kane 8					
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Solid	Others	H2SO4	HN03	HCI NaOH	ZnAc	Unpres	Other:	Filtered	Composite	1,1-DCE	cis-1,2-DCE	Trans-1,2-DCE	PCE 8260D	TCE 8260D	Vinyl Chloride	1,4-Dioxane					Sample Specific Notes / Special Instructions:
TRIP BLANK_ 37				1				ľ	1				N	G	X	X	X	х	Х	X						1 Trip Blank
MW-1785_080723	8/7/22	1300		6				1	6				N	6	X	X	×	X	χ	X	X					3 VOAs for 8260D 3 VOAs for 8260D SI
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Possible Hazard Identification	ritant 🗆 Poise	n D	Unkn			-	Sa		Dispo: cturn to			may be				les are				han 1			<u> </u>			
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ample Address: 11850 Boston Post ubmit all results through Cadena at itomalia@cadena	, ico.com. Cadena #	≠E203631																								
evel IV Reporting requested.	10								15																	
LAT IWW	Company: AV (A Company:	dis		8/2	31,23	5/07	20	0	Kei	Ja v	V V	Co	12	Sto	٥ ₀	98			Comp	pany:	- CL (1i	5			Date/Time: 8/8/23/0700
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		1		~																						

Client Sample ID: TRIP BLANK_137

Date Collected: 08/07/23 00:00

Date Received: 08/09/23 08:00

Matheads OMOAC 0000D Malat	
wiethod: Sw846 8260D - volati	ile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/16/23 16:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/16/23 16:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/16/23 16:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/16/23 16:22	1
Surrogate	%Recovery	Qualifier	Limits			-	Prepared	Analyzed	Dil Fac

ourrogute	Junceovery Que	Linito Ennito		ricpurcu	Analyzeu	Diriud	·
1,2-Dichloroethane-d4 (Surr)	107	62 - 137	—		08/16/23 16:22	1	i
4-Bromofluorobenzene (Surr)	94	56 - 136			08/16/23 16:22	1	l
Toluene-d8 (Surr)	93	78 - 122			08/16/23 16:22	1	l
Dibromofluoromethane (Surr)	116	73 - 120			08/16/23 16:22	1	1

Client Sample ID: MW-178S_080723 Date Collected: 08/07/23 13:00 Date Received: 08/09/23 08:00

Dibromofluoromethane (Surr)

Lab Sample ID: 240-189770-2 Matrix: Water

Method: SW846 8260D 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			08/10/23 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 120			-		08/10/23 15:43	1

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

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			08/16/23 16:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/16/23 16:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			08/16/23 16:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			08/16/23 16:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/16/23 16:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		62 - 137			-		08/16/23 16:45	1
4-Bromofluorobenzene (Surr)	88		56 <u>-</u> 136					08/16/23 16:45	1
Toluene-d8 (Surr)	96		78 - 122					08/16/23 16:45	1

73 - 120

Matrix: Water

Lab Sample ID: 240-189770-1

08/16/23 16:45

1