

**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Kristoffer Hinskey ARCADIS US Inc 28550 Cabot Drive Suite 500 Novi, Michigan 48377 Generated 11/15/2023 4:26:20 AM

## JOB DESCRIPTION

Ford LTP - Off Site

## **JOB NUMBER**

240-194826-1

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

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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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RPD

TEF

TEQ

TNTC

-		
Qualifiers		3
GC/MS VOA		
Qualifier	Qualifier Description	
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.	
¤	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	8
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	9
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)	13
MDC	Minimum Detectable Concentration (Radiochemistry)	13
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)	

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Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

### Job ID: 240-194826-1

#### Laboratory: Eurofins Cleveland

#### Narrative

Job Narrative 240-194826-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/4/2023 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 2.6°C and 2.9°C

#### GC/MS VOA

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): MW-118S 110223 (240-194826-2).

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
240-194826-1	TRIP BLANK_12	Water	11/02/23 00:00	11/04/23 08:00
240-194826-2	MW-118S_110223	Water	11/02/23 09:58	11/04/23 08:00

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### **Detection Summary**

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

### Client Sample ID: TRIP BLANK\_12

No Detections.

### Client Sample ID: MW-118S\_110223

No Detections.

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Job ID: 240-194826-1

Lab Sample ID: 240-194826-1

Lab Sample ID: 240-194826-2

### Client Sample ID: TRIP BLANK\_12

Date Collected: 11/02/23 00:00 Date Received: 11/04/23 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			11/11/23 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/11/23 18:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/11/23 18:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 18:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/11/23 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137			-		11/11/23 18:22	1
4-Bromofluorobenzene (Surr)	75		56 - 136					11/11/23 18:22	1
Toluene-d8 (Surr)	88		78 - 122					11/11/23 18:22	1
Dibromofluoromethane (Surr)	92		73 - 120					11/11/23 18:22	1

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Job ID: 240-194826-1

Matrix: Water

Lab Sample ID: 240-194826-1

### Client Sample ID: MW-118S\_110223

Date Collected: 11/02/23 09:58 Date Received: 11/04/23 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			11/14/23 01:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 120			-		11/14/23 01:28	1
Method: SW846 8260D - Volati	ile 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			11/11/23 22:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/11/23 22:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 22:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/11/23 22:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 22:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/11/23 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137			-		11/11/23 22:55	1
4-Bromofluorobenzene (Surr)	75		56 - 136					11/11/23 22:55	1
Toluene-d8 (Surr)	90		78 - 122					11/11/23 22:55	1
Dibromofluoromethane (Surr)	92		73 - 120					11/11/23 22:55	1

11/15/2023

Job ID: 240-194826-1

### Lab Sample ID: 240-194826-2 Matrix: Water

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

#### Matrix: Water

## Prep Type: Total/NA

				Percent Su	rrogate Reco
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-194809-C-1 MS	Matrix Spike	116	97	102	108
240-194809-D-1 MSD	Matrix Spike Duplicate	104	83	92	100
240-194826-1	TRIP BLANK_12	107	75	88	92
240-194826-2	MW-118S_110223	107	75	90	92
LCS 240-594284/5	Lab Control Sample	100	86	95	96
MB 240-594284/8	Method Blank	108	77	91	94
Surrogate Legend					
DCA = 1,2-Dichloroethar	ne-d4 (Surr)				
BFB = 4-Bromofluorober	nzene (Surr)				
TOL = Toluene-d8 (Surr)					
DBFM = Dibromofluoron	nethane (Surr)				

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

#### Matrix: Water

			Percent Surrogate Recovery (Acceptance Limits)
		DCA	
ab Sample ID.	Client Sample ID	(66-120)	
240-194776-H-2 MS	Matrix Spike	85	
240-194776-N-2 MSD	Matrix Spike Duplicate	83	
240-194826-2	MW-118S_110223	94	
_CS 240-594455/3	Lab Control Sample	84	
MB 240-594455/5	Method Blank	82	

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

Prep Type: Total/NA

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

#### Matrix: Water Analysis Batch: 594284

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/11/23 15:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/11/23 15:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 15:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/11/23 15:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 15:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/11/23 15:04	1

	МВ	МВ					
Surrogate	%Recovery	Qualifier	Limits	Prep	bared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		62 - 137			11/11/23 15:04	1
4-Bromofluorobenzene (Surr)	77		56 - 136			11/11/23 15:04	1
Toluene-d8 (Surr)	91		78 - 122			11/11/23 15:04	1
Dibromofluoromethane (Surr)	94		73 - 120			11/11/23 15:04	1

#### Lab Sample ID: LCS 240-594284/5 Matrix: Water Analysis Batch: 594284

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	25.0	30.3		ug/L		121	63 - 134	
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	77 - 123	
Tetrachloroethene	25.0	26.9		ug/L		108	76 - 123	
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	75 - 124	
Trichloroethene	25.0	25.9		ug/L		103	70 - 122	
Vinyl chloride	12.5	12.3		ug/L		98	60 - 144	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)			62 - 137
4-Bromofluorobenzene (Surr)	86		56 - 136
Toluene-d8 (Surr)	95		78 - 122
Dibromofluoromethane (Surr)	96		73 - 120

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### Lab Sample ID: 240-194809-C-1 MS Matrix: Water

### Analysis Batch: 594284

Toluene-d8 (Surr)

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethene	1.0	U	25.0	32.1		ug/L		128	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	25.7		ug/L		103	66 - 128
Tetrachloroethene	1.0	U	25.0	26.8		ug/L		107	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	26.8		ug/L		107	56 - 136
Trichloroethene	1.0	U	25.0	26.4		ug/L		106	61 - 124
Vinyl chloride	1.0	U	12.5	10.2		ug/L		82	43 - 157
	MS	MS							
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	116		62 - 137						
4-Bromofluorobenzene (Surr)	97		56 - 136						

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

Client Sample ID: Lab Control Sample

**Client Sample ID: Matrix Spike** 

Prep Type: Total/NA

Prep Type: Total/NA

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78 - 122

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	C-1 MS							Client	Sample ID: Ma	atrix S	pike
Matrix: Water									Prep Type		
Analysis Batch: 594284											
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
Dibromofluoromethane (Surr)	108		73 - 120								
Lab Sample ID: 240-194809-	D-1 MSD						Client S	Sample II	D: Matrix Spike		
Matrix: Water									Prep Type	: Tota	I/NA
Analysis Batch: 594284											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPI
Analyte		Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits F	RPD	Limi
1,1-Dichloroethene	1.0	U	25.0	30.3		ug/L		121	56 - 135	6	26
cis-1,2-Dichloroethene	1.0	U	25.0	23.9		ug/L		95	66 - 128	8	14
Tetrachloroethene	1.0	U	25.0	25.0		ug/L		100	62 - 131	7	20
trans-1,2-Dichloroethene	1.0	U	25.0	26.1		ug/L		104	56 - 136	3	15
Trichloroethene	1.0	U	25.0	24.7		ug/L		99	61 - 124	7	15
Vinyl chloride	1.0	U	12.5	12.6		ug/L		101	43 - 157	21	24
		MED									
Surragata		MSD Qualifiar	Limita								
Surrogate	%Recovery 104	Qualifier	Limits 62 - 137								
1,2-Dichloroethane-d4 (Surr)											
4-Bromofluorobenzene (Surr)	83		56 - 136								
Toluene-d8 (Surr)	92		78 - 122								
Dibromofluoromethane (Surr)	100		73 - 120								
lethod: 8260D SIM - Vol		: Compoun	ds (GC/MS)					Client S	Sample ID: Met	hod B	lan
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944		: Compoun	ds (GC/MS)					Client S	Sample ID: Met Prep Type		
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455			ds (GC/MS)					Client S			
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455	455/5	МВ МВ							Ргер Туре	e: Tota	I/NA
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte	455/5	MB MB esult Qualifier			MDL Unit		D	Client S	Prep Type Analyzed	e: Tota	<b>I/NA</b> Vil Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455	455/5	МВ МВ			MDL Unit		D		Ргер Туре	e: Tota	<b>I/NA</b> Vil Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte	455/5	MB MB esult Qualifier					<u>D</u>		Prep Type Analyzed	e: Tota	<b>I/NA</b> Vil Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte	455/5 R	MB MB esult Qualifier 2.0 U							Prep Type Analyzed	<b>2: Tota</b>	<b>iil Fac</b> 1
Method: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate	455/5 R	MB MB esult Qualifier 2.0 U MB MB						Prepared	Analyzed           11/13/23 21:06	<b>D</b>	il/NA il Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane	455/5 R	MB MB esult Qualifier 2.0 U MB MB overy Qualifier						Prepared	Analyzed           11/13/23 21:00           Analyzed	<b>D</b>	il/NA il Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier						Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed	<b>D</b> <u>D</u> <u>D</u> <u>D</u> <u>D</u> <u>D</u>	NI/NA Nil Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr)	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier						Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA vil Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier						Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           D: Lab Contr	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier						Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           D: Lab Contr	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier	RL 2.0 2.0 66 - 120	LCS	0.86 ug/L	Unit		Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           11/13/23 21:00           11/13/23 21:00           D: Lab Contr           Prep Type	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier	RL 2.0 66 - 120 Spike	LCS	0.86 ug/L	Unit ug/L	Clier	Prepared Prepared	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           11/13/23 21:00           0           11/13/23 21:00           0           11/13/23 21:00           0           11/13/23 21:00           0           11/13/23 21:00           0           0           1D: Lab Contr           Prep Type           %Rec	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 20 66 - 120 Spike Added	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample	Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           e ID: Lab Contr           Prep Type           %Rec           Limits	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 20 20 66 - 120  Spike 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample	Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           e ID: Lab Contr           Prep Type           %Rec           Limits	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample	Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           e ID: Lab Contr           Prep Type           %Rec           Limits	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 20 20 66 - 120  Spike 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample	Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           Analyzed           11/13/23 21:06           e ID: Lab Contr           Prep Type           %Rec           Limits	2: Tota <u></u> <u></u> <u></u> ol Sar	ni/NA iii Fac iii Fac nple
Aethod: 8260D SIM - Vol Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr)	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample %Rec 94	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           e ID: Lab Contr           Prep Type           %Rec           Limits           80 - 122	•: Tota D ool Sar •: Tota	liii Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8260D SIM - Vola Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: 240-194776-	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample %Rec 94	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           e ID: Lab Contr           Prep Type           %Rec           Limits           80 - 122           Sample ID: Mate	e: Tota	ni/NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8260D SIM - Vola Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: 240-194776- Matrix: Water	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 	LCS Result	0.86 ug/L		Clier	Prepared Prepared nt Sample %Rec 94	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           e ID: Lab Contr           Prep Type           %Rec           Limits           80 - 122	e: Tota	ni/NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8260D SIM - Vola Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane Surrogate 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: 240-194776-	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL           2.0           Limits           66 - 120           Spike           Added           10.0           Limits           66 - 120	LCS Result 9.43	0.86 ug/L LCS Qualifier		Clier	Prepared Prepared nt Sample %Rec 94	Analyzed           11/13/23 21:00           4nalyzed           11/13/23 21:00           4nalyzed           11/13/23 21:00           6 ID: Lab Contr           Prep Type           %Rec           Limits           80 - 122           Sample ID: Ma           Prep Type	e: Tota	ni/NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8260D SIM - Vola Lab Sample ID: MB 240-5944 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: LCS 240-594 Matrix: Water Analysis Batch: 594455 Analyte 1,4-Dioxane <i>Surrogate</i> 1,2-Dichloroethane-d4 (Surr) Lab Sample ID: 240-194776- Matrix: Water	455/5 	MB MB esult Qualifier 2.0 U MB MB overy Qualifier 82	RL 2.0 	LCS Result 9.43	0.86 ug/L		Clier	Prepared Prepared nt Sample %Rec 94 Client	Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           Analyzed           11/13/23 21:00           e ID: Lab Contr           Prep Type           %Rec           Limits           80 - 122           Sample ID: Mate	e: Tota	ni/NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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

	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	85		66 - 120								
- Lab Sample ID: 240-194776-	N-2 MSD					c	lient Sa	ample IC	): Matrix Sp	oike Dur	olicate
Matrix: Water									Prep 1	Гуре: То	tal/NA
Analysis Batch: 594455											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	2.0	U	10.0	10.3		ug/L		103	51 _ 153	5	16
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	83		66 - 120								

**Eurofins Cleveland** 

### GC/MS VOA

### Analysis Batch: 594284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-194826-1	TRIP BLANK_12	Total/NA	Water	8260D	
240-194826-2	MW-118S_110223	Total/NA	Water	8260D	
MB 240-594284/8	Method Blank	Total/NA	Water	8260D	
CS 240-594284/5	Lab Control Sample	Total/NA	Water	8260D	
240-194809-C-1 MS	Matrix Spike	Total/NA	Water	8260D	
	Matrix Chika Dunlianta	Total/NA	Water	8260D	
	Matrix Spike Duplicate	Total/NA	Water	02000	
240-194809-D-1 MSD nalysis Batch: 594455	5				
nalysis Batch: 594455 .ab Sample ID	5 Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
nalysis Batch: 594455 Lab Sample ID 240-194826-2	5 Client Sample ID MW-118S_110223	Prep Type Total/NA	Matrix Water	Method 8260D SIM	Prep Batch
nalysis Batch: 594455 Lab Sample ID 240-194826-2 MB 240-594455/5	Client Sample ID MW-118S_110223 Method Blank	Prep Type Total/NA Total/NA	Matrix Water Water	Method 8260D SIM 8260D SIM	Prep Batch
nalysis Batch: 594455 Lab Sample ID 240-194826-2 MB 240-594455/5	5 Client Sample ID MW-118S_110223	Prep Type Total/NA	Matrix Water	Method 8260D SIM	Prep Batch
	Client Sample ID MW-118S_110223 Method Blank	Prep Type Total/NA Total/NA	Matrix Water Water	Method 8260D SIM 8260D SIM	Prep Batch

Date Received: 11/04/23 08:00

Matrix: Water

### Client Sample ID: TRIP BLANK\_12 Date Collected: 11/02/23 00:00

Lab Sample ID: 240-194826-1
Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D			594284	TJL2	EET CLE	11/11/23 18:22

### Client Sample ID: MW-118S\_110223 Date Collected: 11/02/23 09:58

Date Received: 11/04/23 08:00

_	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	594284	TJL2	EET CLE	11/11/23 22:55
Total/NA	Analysis	8260D SIM		1	594455	CS	EET CLE	11/14/23 01:28

#### Laboratory References:

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

**Eurofins Cleveland** 

### 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	
Georgia	State	4062	02-27-24	
Illinois	NELAP	200004	07-31-24	
lowa	State	421	06-01-25	
Kentucky (UST)	State	112225	02-28-24	
Kentucky (WW)	State	KY98016	12-31-23	
Michigan	State	9135	02-27-24	
Minnesota	NELAP	039-999-348	12-31-23	
Minnesota (Petrofund)	State	3506	08-01-23 *	
New Jersey	NELAP	OH001	07-01-24	
New York	NELAP	10975	04-02-24	
Ohio	State	8303	02-27-24	
Ohio VAP	State	ORELAP 4062	02-27-24	
Oregon	NELAP	4062	02-27-24	
Pennsylvania	NELAP	68-00340	08-31-24	
Texas	NELAP	T104704517-22-19	08-31-24	
Virginia	NELAP	460175	09-14-24	
West Virginia DEP	State	210	12-31-23	_

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

Tes	TestAmerica Laboratory location: Brighton	1	in Drive, Suite 200	10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763	16 / 810-23	29-2763					IESIAMERIC(	3
Client Contact	Regulatory program:	DW	NPDES	RCRA	Other							r 
Company Name: Arcadis											TestAmerica Laboratories. Inc.	s. Inc.
Address: 28550 Cabot Drive, Suite 500	Cheft Froject Manager: Kris Hinskey	nskey	Site Contact: Christina Weaver	ıristina Weaver		Lab Cor	Lab Contact: Mike DelMonico	DelMoni	0		COC No:	
City/State/Zin: Novi MI 48377	Telephone: 248-994-2240		Telephone: 248-994-2240	994-2240		Telepho	Telephone: 330-497-9396	7-9396				Τ
	Email: kristoffer.hinskev@arcadis.com	dis.com	Analysis Tur	Analysis Turnaround Time				Anglvees	30		1 of 1 COC	Í
Phone: 248-994-2240			TAT at a					<b>_</b>			FOU IAD LISC ONLY	
Project Name: Ford LTP Off-Site	- Sampler Name: トロビード ゲッンナーメ	-14	ent fro	3 weeks							Walk-in client	
Project Number: 30167538.402.04	/Ca		10 day 〈		and a first				MI		Lab sampling	
PO#30167538.402.04	Shipping/Tracking No:			2 days 1 day	=dr1ð	Q09	10978	00928	S 009		Job/SDG No:	
		nont Matrix	T	Preservativ	lqms2 bars \D=stite=C \	25-DCE 82601	8560D \$-1,2-DCE	S260D	28 ənexoi		Sample Specific Notes /	,
Sample Identification	Sample Date Sample Time	rifA nupA nibo2 nifo2	NªO HCI HNC H7S	ofio 10s 10s 10s 10s 10s 10s 10s 10s 10s 10s	Con	r-sio			]-4,1		Special Instructions:	
TRIP BLANK_ 12	-	<b></b>	~		С U Z	×××	××	××			1 Trip Blank	
mw- 1185 _ 110223	11-2-23 0958	و	و		5	X X X	×	×	×		3 VOAs for 8260D	
							٤		~		3 VUAS for 8260D	Σ
				-					-			
<del>c 18</del>									I			
S of 2									I			
				240-1	94826 Ch	240-194826 Chain of Custody	stody					
											UCHICAN	
Possible Hazard Identification	Foison B	Unknown	Sample Dispos	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Semple Disposal ( A fee may be assessed if samples are retained longer than 1 month)	sessed if sa	mples are r	tained long	ger than 1	month)		06	
Special Instructions/OC Requirements & Comments: Sample Address: 12124 Rn 470 N 2045			~		to mod	2			MOULUS			
Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631 Level IV Reporting requested.	o.com. Cadena #E203631											
Rehnquished by Report M / Once	Company Ar ca dis	Date/Time. 11.2.23/15	1500 Re	Received by Schender	ende			Company.	2.4		Date/Time. 11-7.73 / 1500	
Reinquested by: NO lan S chinder	Company: Artad: S	Date/Time: / 1525		Received by.	Sturney	d'an		Company:	drS		Date/Time:	5
clinquished by Bernet Levy	company Contractes	Date/Time: $u(3/23)$		Received in Laboratory by:	hy:		0	Company:	1A	1	Date/Time; 11 [3] 33 <b>12</b>	10 HO
11/15/2	7 MARE	р Д	2012	P I I				- 1	ET.		11-4-23	l 22
J				<u>)</u> {								

Surpfus - Cleveland Sample Receipt Form/Narrative       Login #	larberton Facility       Code state in the object of the sealer of the sea	*	Val 876
html	Minim       MCGdds       Site Name       Coder unpecked by:         Operad on       Image: Coder and Code an		Login # :
Art Cetter do n       // 4/ 2.3       Opened on       // 4/ 2.3         Opened on       Excortions Courser       Other         edEx. 'P       Grd Exp       UPS FAS       Cappoint) Client Drop Off Eurofins Courser       Other         unifunc       Coller timperatures: Drop-off Date/Time       Storage Location       Storage Location         unifunc       Coller timperature upon Teceipt       Erst Mathie Cooler for mone       Corrected Cooler Temp.       Cooler temperature upon Teceipt         Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?       Yes No       No       Tests that are attriat are attriat.       Yes No         Obd all bottle habels (Dr/Date/Time) be reconciled citation (Unorkenn)?       Yes No       Yes No         Out all bottle habels (Dr/Date/Time) be reconciled sylthybe COC?       Yes No       Yes No         Out all bottle habels (Dr/Date/Time) be reconciled sylthybe COC?       Yes No       Yes No         Out at bottle habels (Dr/Date/Time) be reconciled sylthybe COC?       Yes No       Yes No         Out at other bottle(s) ath correct pH u	ooler Received on       //-4/23       Opened on       //-4/23       Opened on         offer Received on       //-4/23       Opened on       //-4/23       Other         edEx. 'f' Grd Exp UPS FAS @xproint) Citent Drop Off Eurofins Courier       Other		Cooler unpacked by:
edEs: "# Grd Exp       UPS FAS       Cappoint) Client Drop Off       Eurofins Courier       Other         tectept After-hours: Drop-off Date/Time       Storage Location	edEx.1 <sup>11</sup> Grd       Exp UPS       FAS       Suppoint)       Client Drop Off       Eurofunc Couler       Other         eeelp1 After-hours: Drop-off Date/Time       Storage Location       urofuns Cooler #	hent <u>ACGAB</u> She Name	innall
iereipt After-hours: Drop-off Date/Time       Storage Location         iurofins Cooler #	setep1 After-hours: Drop-off Date/Time       Storage Location         urofins Cooler #       C       Foam Box       Other         Packing material used: Bable Werp       Foam Plastic Bag       None       Other         COOLANT:       Werles       Blue Le       Dry Lee       Water       None         COOLANT:       Werles       Blue Le       Dry Lee       Water       None         COOLANT:       Werles       Blue Lee       Dry Lee       Water       None         Cooler temper/custody seals on the outside of the cooler(s)?       If Yee Quantity       If Base No       Yee No       No         Were tamper/custody seals on the outside of the cooler(s)?       Were tamper/custody seals on the sample(s)       Yee No       No         Were tamper/custody papers accompany the sample(s)?       Wes No       No       Yee No       No         Was/were the person(s) who collected the samples clearly identified on the COC?       Yee No       No       No         Did all bottles as anyle, does the COC epecify preservative(Y/N), # of containers (YN), and sample type of grb/coms(YN)?       Wore correct bottle(s) used for the test(s) indicated?       Yee No       Yee No         Sufficient quantity received to perform indicated analyses?       Yee No       Yee No       Yee No       Yee No         Were correct bottle(s) at t		
birofins Cooler # Foam Box Client Cooler Box Other	urofins Cooler # Foam Box Client Cooler Box Other Packing material used: BubbleWmp Foam Plastic Bag None Other COOLANT: Werfield Blue LO Dy Lee Water None Cooler temperature upon Teccipi IR GUN # (CF 'C) Observed Cooler Temp 'C Corected Cooler Temp'' Were tamper/custody seals on the bottle(s) or bottle kits (L1EqMeHg)? Were tamper/custody seals instat and uncompromised? Shippers' packing sitg attached to the cooler(s)? If Yes Quantity Yes Ko Were tamper/custody seals instat and uncompromised? Shippers' packing sitg attached to the cooler(s)? Did custody papers accompany the sample(s)? Were tamper/custody seals instat and uncompromised? Shippers' packing sitg attached to the cooler(s)? Did custody papers accompany the sample(s)? Were tamper/custody case instat and uncompromised? Solid all bottle labels (ID/Date/Time) be reconciled vibt/bhe COC? For each sample, does the COC epecify preservatives(V/N), # of containers (N), and sample type of grab/comp(V/N)? Were correct whate samples and all listed on the COC? If yes, Questions 13-17 have been checked at the originating laboratory. 8. Were all preserved sample(s) at the correct pH upon receipt? 18. Were Volta on the COC? Were some the share sample(s) at the correct pH upon receipt? 19. Were correct in the cooler(s)? Trip Blank Lot # Yes No 20. Was a LL Hg or Me Hg trip blank present? 4. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES □ additional next page Samples processed by: 2. SAMPLE CONDITION mple(s)		
Packing material used BdDEeWrep Form Plastic Bag None Other COOLANT: VetTee Blue lce Dry lce Water None COOLANT: VetTee Blue lce Dry lce Water None R GUN # (CFC) Observed Cooler TempC Corrected Cooler Temp Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Yes No NA Were tamper/custody seals on the bottle(s) or bottle kits (LLHe/McH2)? Were tamper/custody seals on the bottle(s) or bottle kits (LLHe/McH2)? Were tamper/custody seals in the bottle(s) or bottle kits (LLHe/McH2)? Were tamper/custody seals in the bottle(s) or bottle kits (LLHe/McH2)? Were tamper/custody seals in the bottle(s) or bottle kits (LLHe/McH2)? Were tamper/custody seals in the somples (Jetar) dentified on the COC? Were the custody papers accompany the samples(Jetar) dentified on the COC? Did custody papers accompany the samples(Jetar) dentified on the COC? For each sample, does the COC specify preservatives(YM), which sample type of grab/comp(YN)? Were correct bottle(s) used for the test(s) indicated? Sufficient quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? If yes, Questions 13-17 have been checked at the originating laboratory. Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Sufficient quantity repeating the correct pH upon receipr? Sufficient quantity repeating the correct pH upon receipr? Were with bubbles >6 mm in any VOA vials? Sufficient quantity repeating the correct pH upon receipr? Sufficient quantity repeating the correct pH upon receipr? Were with bubbles >6 mm in any VOA vials? Sufficient quantity repeating the correct pH upon receipr? Sufficient quantity repeating the correct pH upon receipr? Were air bubbles >6 mm in any VOA vials? Sufficient quantity received at the recommended holding time had expired. Were VOAs on the COC? Sufficient quantity received after the	Packing material used: Bubble Verp Foam Plastic Bag None Other		
COOLANT: Writes Blue lee Dry lee Water None Cooler temperature upon receipt IR GUN # (CFC) Observed Cooler Temp (C corrected Cooler Temp Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Yes No NA Were tamper/custody seals inte at an uncompromised? Shippers' packing slip stached to the cooler(s)? Did custody papers accompany the sample(s)? Were tamper/custody seals inter at an uncompromised? Were to the person(s) who collected the samples clearly identified on the COC? Was'were the person(s) who collected the samples clearly identified on the COC? For each sample, does the COC specify preservatives(V/N), # of containers No Were correct bottle (s) used for the test(s) indicated? Sufficient quantity received to perform indicated and the COC? If yes, Questions 13-17 have been checked at the originating laboratory. Were VOAs on the COC? Was aver VOAs on the COC? Was aver VOAs on the COC? Was a Vach trip blank present in the cooler(s)? Types (Were VOAs on the COC? Was a Ut thip blank present in the cooler(s)? Were air bubbles >6 mm in any VOA vials? Mere all preserved sample(s)? Were air bubbles >6 mm in any VOA vials? Mere all preserved sample(s)? Sufficient questives received in the this. Mas a VOA trip blank present in the cooler(s)? Types (Were VOAs on the COC? Sufficient questives for the test(s) middited and the originating laboratory. Sufficient questives devendenchecked at the originating laboratory. Sufficient questives devendenchecked in the trip blank Lot #	COLANT:       WIEC       Blue Ice       Dry Ice       Water       None         Cooler temperature upon receipt       "C)       Observed Cooler Temp"C       Corrected Cooler Temp"C         Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity       Yes No       Yes No       Yes No         Were tamper/custody seals on the outside of the cooler(s)?       Were tamper/custody seals on the outside of the cooler(s)?       Yes No       Yes No         Shippers' packing sitp attached to the cooler(s)?       Yes No       Yes No       Yes No         Were tamper/custody seals intact and uncompromised?       Yes No       Yes No         Ware consolver the custody papers accompany the sample(s)?       Yes No       Yes No         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with/the COC?       Yes No       No         Could all bottle labels (ID/Date/Time) be reconciled with/the COC?       Yes No       No         Were tamper/custody search and uncels)       indicated anlyses?       Yes No         Were the custody have been becked at the originating laboratory.       No       Yes No         Were all prevend sample(s) at the correct pH upon receipt?       Yes No       Yes No         Were air whohes asamples and all listed on		
Cooler temperature upon receipt       If See Multiple Cooler Ferm         IR GUN #       (CF,C) Observed Cooler Temp,C Corrected Cooler Temp,C         Were tamper/custody seals on the outside of the cooler(s)? If Yes QuantityYes No NA       Test that are set and ne counside of the cooler(s)? If Yes QuantityYes No NA         Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?       Yes No NA         Objects early of the could of the cooler(s)?       Yes No NA         Were tamper/custody seals intext and uncompromised?       Yes No         Shipper's packing slip attached to the cooler(s)?       Yes No         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         Could all bottle babels (ID/Date/Time) be reconciled with the COC?       Yes No         Sufficient quantity received to perform indicated analyses?       Yes No         Are these work share samples and all listed on the COC?       Yes No         Swere all preserved sample(s) at the correct pH upon receipt?       Yes No         Were tamper/custody trip blap preserved sample(s) at the correct pH upon receipt?       Yes No         Were all bottle babels of mn in any VOA vials?       Larger than this.       Yes No         Swere all preserved sampleses in the cooler(s)? Trip Blank Lot #       Yes No       <	Cooler temperature upon Teccipt       If See Multiple Cooler Temp.       "C Corrected Cooler Temp.       "C Corrected Cooler Temp.       "C Corrected Cooler Temp.       "C         Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity       Yes No       Yes No       Test that are set seals on the outside of the cooler(s)? If Yes Quantity       Yes No       No       Test that are set seals on the outside of the cooler(s)?       Were tamper/custody seals intact and uncompromised?       Yes No       No       Were tamper/custody seals intact and uncompromised?       Yes No       Were tamper/custody papers accompany the sample(s)?       Yes No       Were tamper/custody papers accompany the sample(s)?       Yes No		None Uther
IR GUN # (CP *C) Observed Cooler Temp *C Corrected Cooler Condent Corrected Cooler Correcte	IR GUN #		
Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Yes No NA Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?          •Were tamper/custody seals intet and uncompromised?       Yes No       Yes No         •Shippers' packing slip attached to the cooler(s)?       Yes No       Yes No       Yes No         •Were tamper/custody seals intet and uncompromised?       Yes No       Yes No       Yes No         •Were the custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         •Were the custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         •Were the custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         •Were the custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         •Were the custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         •Were the custody papers accompany the signed in the appropriate place?       Yes No       Yes No         •Were the custody papers accompany the signed in the appropriate place?       Yes No       Yes No         •Were the custody papers accompany the test(s) indicated analyses?       Yes No       Yes No         •Were VOAs on the COC?       Yes No       Yes No       Yes No         •Were VOAs on the COC?       Yes No       Yes No       Yes No <td>Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity       Yes No       No       Tests that are not detected for pill by the color(s) signed &amp; dated?         Were tamper/custody seals intact and uncompromised?       Yes No       No       No       ReetVing:         Shippers' packing siti pattached to the cooler(s)?       Yes No       No       No       ReetVing:       View to no         Did custody papers accompany the sample(s)?       Yes No       Yes No       No       No       No         Were tamper/custody seals intact and uncompromised?       Yes No       No</td> <td></td> <td></td>	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity       Yes No       No       Tests that are not detected for pill by the color(s) signed & dated?         Were tamper/custody seals intact and uncompromised?       Yes No       No       No       ReetVing:         Shippers' packing siti pattached to the cooler(s)?       Yes No       No       No       ReetVing:       View to no         Did custody papers accompany the sample(s)?       Yes No       Yes No       No       No       No         Were tamper/custody seals intact and uncompromised?       Yes No		
•Were the seals on the outside of the cooler(s) signed & dated?       Ler No NA       The stand Trip II by the stamper/custody seals intet and uncompromised?         •Were tamper/custody seals intet and uncompromised?       Yes No       Yes No       Yes No         Did custody papers accompany the sample(s)?       Yes No       Yes No       Yes No         Were tamper/custody seals intet and uncompromised?       Yes No       Yes No       Yes No         Were the ustody papers accompany the sample(s)?       Yes No       Yes No       Yes No         Were the custody papers relinquished & signed in the appropriate place?       Yes No       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No       Yes No         Were correct bottle(s) used for the test(s) indicated?       Yes No       Yes No         Were are babbles >6 mm in any VOA vials?       Yes No       Yes No         Were are bubbles >6 mm in any VOA vials?       Yes No       Yes No         Were a voAs an the COC?       Yes No       Yes No         Were a voAs an the COC?       Yes No       Yes No         Were VOAs on the COC?       Yes No       Yes No         Were a voAs an the cocler(s)?       Yes No       Yes No <t< td=""><td>-Were tamper/custody seals on the bottle(s) or bottle kits (L1Hg/MeHg)?       Yes No       Present init if if if it is the beeked for pit by reservations of the signed is the signed in the appropriate place?       Yes No       Present init if if it is the beeked for pit by reservations of the signed in the appropriate place?       Yes No       Yes No       Present init if if it is the beeked for pit by reservations of the appropriate place?       Yes No       Yes No       Present init if if it is the appropriate place?       Yes No       Yes No       Present is the appropriate place?       Yes No       Present is the coder(s)?       Yes No       Present is the coder is isolated in the isolated analyses?       Yes No       No       Yes No       No</td><td></td><td>1</td></t<>	-Were tamper/custody seals on the bottle(s) or bottle kits (L1Hg/MeHg)?       Yes No       Present init if if if it is the beeked for pit by reservations of the signed is the signed in the appropriate place?       Yes No       Present init if if it is the beeked for pit by reservations of the signed in the appropriate place?       Yes No       Yes No       Present init if if it is the beeked for pit by reservations of the appropriate place?       Yes No       Yes No       Present init if if it is the appropriate place?       Yes No       Yes No       Present is the appropriate place?       Yes No       Present is the coder(s)?       Yes No       Present is the coder is isolated in the isolated analyses?       Yes No       No       Yes No       No		1
-Were tamper/custody seals intact and uncompromised?       Yes       No         Shippers' packing sip attached to the cooler(s)?       Yes       No         Did custody papers accompany the sample(s)?       Yes       No         Ware the custody papers relinquished & signed in the appropriate place?       Yes       No         Out all bottle labels (DDDate/Time) be reconciled with/the COC?       Yes       No         Could all bottle labels (DDDate/Time) be reconciled with/the COC?       Yes       No         Subscreact bottle(s) used for the test(s) indicated manayses?       Yes       No         Subscreact bottle(s) used for the test(s) indicated manayses?       Yes       No         Are these work share samples and all listed on the COC?       Yes       No         Swere all preserved sample(s) at the correct pH upon receipt?       Yes       No         Were air bubbles >6 mm in any VOA vials?       Image that this.       Yes       Yes       No         S. Were all preserved samples and link present?       Yes       Yes       No       No         S. Were all preserved samples at the correct pH upon receipt?       Yes       No       No       No         S. Were all preserved samples on the cooler(s)?       Yes       No       No       No       No         S. Was a U.L Hg or Me Hg trip blank present?	Were tamper/custody seals intact and uncompromised?       Yes No         Shippers' packing slip statched to the cooler(6)?       Yes No         Did custody papers are linguished & signed in the appropriate place?       Yes No         Warkwere the person(s) who collected the samples clearly identified on the COC?       Yes No         Did all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         For each sample, does the COC specify preservatives (V/N), # of containers (N/N), and sample type of grab/comp(P/N)?         Netre correct bottle(s) used for the test(s) indicated?       Yes No         Were these work share samples and all listed on the COC?       Yes No         If yes, Questions 13-17 have been checked at the originating laboratory.       Yes No         Were wOAs on the COC?       Yes No         Were volubles >6 mm in any VOA vials?       I arger than this.         Were all preserved sample(s) at the correct pH upon receipt?       Yes No         Were all bobbles >6 mm in any VOA vials?       I additional next page         Samples processed by:       Yes No         Was a LL Hg or Me Hg trip blank present?       yes No         Mare correct pPM	•	Lantity CEB No Tests that are not
-Were tamper/custody seals intact and uncompromised?       Yes	Were tamper/custody seals intact and uncompromised?       Yes No         Shippers' packing slip statched to the cooler(6)?       Yes No         Did custody papers are linguished & signed in the appropriate place?       Yes No         Warkwere the person(s) who collected the samples clearly identified on the COC?       Yes No         Did all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         For each sample, does the COC specify preservatives (V/N), # of containers (N/N), and sample type of grab/comp(P/N)?         Netre correct bottle(s) used for the test(s) indicated?       Yes No         Were these work share samples and all listed on the COC?       Yes No         If yes, Questions 13-17 have been checked at the originating laboratory.       Yes No         Were wOAs on the COC?       Yes No         Were volubles >6 mm in any VOA vials?       I arger than this.         Were all preserved sample(s) at the correct pH upon receipt?       Yes No         Were all bobbles >6 mm in any VOA vials?       I additional next page         Samples processed by:       Yes No         Was a LL Hg or Me Hg trip blank present?       yes No         Mare correct pPM		eHall? \\0 \Var \\0
Shippers' packing slip strached to the cooler(s)?       Yes Mo         Did custody papers accompany the sample(s)?       Yes No         Were the custody papers relinquished & signed in the appropriate place?       Yes No         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No         Did all bottles arrive in good condition (Unbroken)?       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         For each sample, does the COC specify preservatives(V/N), # of containers (V/N), and sample type of grab/comp(V/N)?       Yes No         0. Were correct bottle(s) used for the test(s) indicated analyses?       Yes No         1. Sufficient quantity received to perform indicated analyses?       Yes No         2. Are these work share samples and all listed on the COC?       Yes No         3. Were all preserved sample(s) at the correct pH upon receipt?       Yes No         4. Were VOAs on the COC?       Yes No         5. Were air bubbles >6 mm in any VOA vials?       4. Larger than this.       Yes No         6. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #       Yes No       Yes No         7. Was a LL Hg or Me Hg trip blank present?       yes No       Yes No       Yes No         8. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       additional next page       Samples processed by:         9.	Shippers' packing slip strached to the cooler(s)?       Yes No         Did custody papers accompany the sample(s)?       Yes No         Were the custody papers accompany the samples clearly identified on the COC?       Yes No         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No         Could all bottles arrive in good condition (Unbroken)?       Yes No         Could all bottles abeness (D/Date/Time) be reconciled with the COC?       Yes No         For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?         Were correct bottle(s) used for the test(s) indicated?       Yes No         Sufficient quantity received to perform indicated analyses?       Yes No         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.       9         Were air bubbles >6 mm in any VOA vials?       Yes No         Were air bubbles >6 mm in any VOA vials?       Yes No         Was a UA trip blank present?       Yes No         Was a L H g or Me Hg trip blank present?       Yes No         Was a L Hg or Me Hg trip blank present?       yes additional next page         Samples processed by:	• •	
Did custody papers accompany the sample(s)?       Yes No       To         Were the custody papers relinquished & signed in the appropriate place?       Yes No       To         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No       To         Did all bottles arrive in good condition (Unbroken)?       Yes No       Yes No         Could all bottle babels (ID/Date/Time) be reconciled with the COC?       Yes No         Were correct bottle(s) used for the test(s) indicated analyses?       Yes No         0. Were correct bottle(s) used for the test(s) indicated analyses?       Yes No         2. Are these work share samples and all listed on the COC?       Yes No         3. Were all preserved sample(s) at the correct pH upon receipt?       Yes No         4. Were VOAs on the COC?       Yes No         5. Were air bubbles >6 mm in any VOA vials?       I Larger than this.       Yes No         6. Was a VOA trip blank present?       Yes No       Yes No         7. Was a LL Hg or Me Hg trip blank present?       Yes No       Yes No         8. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       additional next page       Samples processed by:         0. SAMPLE CONDITION       were received after the recommended holding time had expired.         mple(s)       were received with bubble >6 mm in diameter. (Notify PM)         8. SAMPLE PRESERVATI	Did custody papers accompany the sample(s)? Were the custody papers relinquished & signed in the appropriate place? Were the person(s) who collected the samples clearly identified on the COC? Were who collected the samples clearly identified on the COC? Use No Could all bottle sative in good condition (Unbroken)? Were correct bottle(s) used for the test(s) indicated? Were correct bottle(s) used for the test(s) indicated? Were correct bottle(s) used for the test(s) indicated? Were vork share samples and all listed on the COC? Were vork share samples (s) at the correct pl upon receipt? Were VOAs on the COC? Were vork share present in the cooler(s)? Trip Blank Lot # Were VOAs on the COC? Were all preserved sample(s) at the correct pl upon receipt? Were VOAs on the COC? Were all preserved sample(s) at the correct pl upon receipt? Were VOAs on the COC? Were all preserved sample(s) at the correct pl upon receipt? Were VOAs on the COC? Were all preserved sample(s) at the correct pl upon receipt? Were VOAs on the COC? Were all preserved in the cooler(s)? Trip Blank Lot # Were VOAs on the COC? Were all preserved in the cooler(s)? Trip Blank Lot # Were voice Mail Other Concerning Were inclusion 13-17 blank present? CHAIN OF CUSTODY & SAMPLE DISCREPANCIES AMPLE CONDITION mple(s) Were received after the recommended holding time had expired. Were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION mple(s) Preservative(s) added/Lot number(s): Were further preserved in the laboratory.		
Were the custody papers relinquished & signed in the appropriate place? Were the person(s) who collected the samples clearly identified on the COC? Were the person(s) who collected the samples clearly identified on the COC? Could all bottle labels (DD/Date/Time) be reconciled with the COC? For each sample, does the COC epecify preservatives (V/N), # of containers (V/N), and sample type of grab/comp(V/N)? Were correct bottle(s) used for the test(s) indicated? Were varies quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? For each sample, does the COC epecify preservatives (V/N), # of containers (V/N), and sample type of grab/comp(V/N)? Were correct bottle(s) used for the test(s) indicated? Were Varies quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? Were air public so the correct pH upon receipt? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No was a VOA trip blank present? Date by via Verbal Voice Mail Other oncerning	Were the custody papers relinquished & signed in the appropriate place?       Tot         Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No         Did all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with the COC?       Yes No         For each sample, does the COC specify preservatives(YMN), # of containers (MN), and sample type of grab/comp(YN)?       No         Netree toottle(s) used for the test(s) indicated analyses?       Yes No         Sufficient quantity received to perform indicated analyses?       Yes No         Were are battle(s) and all listed on the COC?       Yes No         Were are preserved sample(s) at the corter pH upon receipt?       Yes No         Were air bubbles >6 mm in any VOA vials?       Larger than this.       Yes No         Were air bubbles >6 mm in any VOA vials?       I Larger than this.       Yes No         Was a LL Hg or Me Hg trip blank present?       Tip Blank Lot #Yes No       No         Was a LL Hg or Me Hg trip blank present?       by via Verbal Voice Mail Other         oncerning		Ven No Oil and Grease
Was/were the person(s) who collected the samples clearly identified on the COC? Too No Did all bottles arrive in good condition (Uabroken)? Yes No Could all bottles (D)/Date/Time) be reconciled with/the COC? Yes No Por each sample, does the COC specify preservatives (P/N), # of containers (P/N), and sample type of grab/comp(P/N)? Were correct bottle(s) used for the test(s) indicated? Yes No Sufficient quantity received to perform indicated analyses? Yes No Are these work share samples and all listed on the COC? Yes No Are these work share samples and all listed on the COC? Yes No Are these work share samples and all listed on the COC? Yes No Were all preserved sample(s) at the correct pH upon receipt? Yes No Were VOAs on the COC? Were VOAs on the COC? Were voAs on the COC? Were voAs on the COC? Were air bubbles >6 mm in any VOA vials? A Larger than this. Was a LL Hg or Me Hg trip blank present? Was a LL Hg or Me Hg trip blank present? Date by via Verbal Voice Mail Other ontacted PM Date by via Verbal Voice Mail Other oncerning	Was/were the person(s) who collected the samples clearly identified on the COC?       Yes No         Did all bottles arrive in good condition (Unbroken)?       Yes No         Could all bottle labels (ID/Date/Time) be reconciled with/the COC?       Yes No         For each sample, does the COC specify preservatives (Y/N), # of containers (YN), and sample type of grab/comp (Y/N)?         Were correct bottle(s) used for the test(s) indicated?       Yes No         2. Are these work share samples and all bited on the COC?       Yes No         3. Sufficient quantity received to perform indicated analyses?       Yes No         2. Are these work share samples and all bited on the COC?       Yes No         3. Were all preserved sample(s) at the correct pH upon receipt?       Yes No         4. Were VOAs on the COC?       Yes No         5. Were air bubbles >6 mm in any VOA vials?       4 Larger than this.       Yes No         6. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #       Yes No       Yes No         7. Was a LL Hg or Me Hg trip blank present?       by       via Verbal Voice Mail Other         concerning		
Did all bottles arrive in good condition (Unbroken)? Could all bottle habels (Dl/Date/Time) be reconciled with the COC? For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp((Y/N)? Were correct bottle(s) used for the test(s) indicated analyses? Sufficient quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? If yes, Questions 13-17 have been checked at the originating laboratory. Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were all present in the cooler(s)? Was a UA trip blank present in the cooler(s)? Was a LL Hg or Me Hg trip blank present? Contacted PM Date Date by via Verbal Voice Mail Other CustroDY & SAMPLE DISCREPANCIES Samples processed by: SAMPLE CONDITION were received after the recommended holding time had expired. mple(s) were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION	Did all bottles arrive in good condition (Unbroken)? Could all bottle sheels (DD/Date/Time) be reconciled with/the COC? Could all bottle labels (DD/Date/Time) be reconciled with/the COC? For each sample, does the COC specify preservatives(VM), # of containers (VM), and sample type of grab/comp(VN)? Were correct bottle(s) used for the test(s) indicated? Sufficient quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? Were all preserved sample(s) at the correct pH upon receipt? Were air bubbles >6 mm in any VOA vials? Were air bubble >6 mm in any VOA vials? Were air bubble >6 mm in diameter. Were received after the recommended holding time had expired. Were and the preserved in the laboratory. Were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION mple(s)		
Could all bottle labels (ID/Date/Time) be reconciled with the COC? For each sample, does the COC specify preservatives (V/N), # of containers (V/N), and sample type of grab/comp(V/N)? Were correct bottle(s) used for the test(s) indicated analyses? Sufficient quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? If yes, Questions 13-17 have been checked at the originating laboratory. Were all preserved sample(s) at the correct pH upon receipt? Were all preserved sample(s) at the correct pH upon receipt? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Were a black present in the cooler(s)? Trip Blank Lot # Was a LL Hg or Me Hg trip blank present? CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: SAMPLE CONDITION mple(s) were received after the recommended holding time had expired. mple(s) were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION	Could all bottle labels (ID/Date/Time) be reconciled with the COC? For each sample, does the COC specify preservatives (V/N), # of containers (V/N), and sample type of grab/comp(V/N)? Were correct bottle(s) used for the test(s) indicated analyses? Sufficient quantity received to perform indicated analyses? Are these work share samples and all listed on the COC? If yes, Questions 13-17 have been checked at the originating laboratory. Were all preserved sample(s) at the correct pH upon receipt? Were air bubbles >6 mm in any VOA vials? Were air bubbles >6 mm in any VOA vials? Was a UA trip blank present in the cooler(s)? Trip Blank Lot # Was a UA trip blank present in the cooler(s)? Trip Blank Lot # Was a LL Hg or Me Hg trip blank present? Chain OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: Sample(s)were received after the recommended holding time had expired. mple(s)were further preserved in a broken container. mple(s)were further preserved in the laboratory. SAMPLE PRESERVATION mple(s)were further preserved in the laboratory.		-
For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/com\$(Y/N)?         Were correct bottle(s) used for the test(s) indicated?       Yes No         Sufficient quantity received to perform indicated analyses?       Yes No         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.       Yes No         Were all preserved sample(s) at the correct pH upon receipt?       Yes No         Were VOAs on the COC?       Yes No         Were air bubbles >6 mm in any VOA vials?       Larger than this.         Yes No       Yes No         Was a LL Hg or Me Hg trip blank present?       Yes No         matced PM       Date       by       via Verbal Voice Mail Other         oncerning	For each sample, does the COC specify preservatives (V/N), # of containers (V/N), and sample type of grab/com#(V/N)?         Were correct bottle(s) used for the test(s) indicated?       Yes No         Sufficient quantity received to perform indicated analyses?       Yes No         Are these work share samples and all listed on the COC?       Yes No         Are these work share samples and all listed on the COC?       Yes No         Were all preserved sample(s) at the correct pH upon receipt?       Yes No (Yes No)         Were are bubbles >6 mm in any VOA vials?       Image: Larger than this.         Was a VOA trip blank present in the cooler(s)?       Yes No         Was a VOA trip blank present?       Yes No         Was a LL Hg or Me Hg trip blank present?       Yes No         Matcated PM       Date       by	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yer No
Were correct bottle(s) used for the test(s) indicated?   Were correct bottle(s) used for the test(s) indicated? Yes No   Sufficient quantity received to perform indicated analyses? Yes No   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. Yes No   Were all preserved sample(s) at the correct pH upon receipt? Yes No   Were VOAs on the COC? Yes No   Were air bubbles >6 mm in any VOA vials? Larger than this.   Yes No Yes No   Was a LL Hg or Me Hg trip blank present in the cooler(s)? Trip Blank Lot #Yes No   ontacted PM Date by via Verbal Voice Mail Other   oncerning	Were correct bothle(s) used for the test(s) indicated?       Yes No         1. Sufficient quantity received to perform indicated analyses?       Yes No         2. Are these work share samples and all listed on the COC?       Yes No         3. Are these work share samples and all listed on the COC?       Yes No         4. Were all preserved sample(s) at the correct pH upon receipt?       Yes No         9. Were air bubbles >6 mm in any VOA vials?       4 Larger than this.       Yes No         9. Were air bubbles >6 mm in any VOA vials?       4 Larger than this.       Yes No         9. Was a VOA trip blank present in the cooler(s)?       Trip Blank Lot #	For each sample, does the COC specify preservatives (Y/N), # of cont	ainers (Y/N), and sample type of grab/comp(Y/N)?
2. 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. Were all preserved sample(s) at the correct pH upon receipt? Yes No Were VOAs on the COC? Yes No Were voAs on the COC? Yes No Were voAs on the COC? Yes No Were air bubbles >6 mm in any VOA vials? Yes Larger than this. Yes No Was a LL Hg or Me Hg trip blank present in the cooler(s)? Trip Blank Lot #Yes No Was a LL Hg or Me Hg trip blank present? Yes No Ontacted PM Date by via Verbal Voice Mail Other Ontacted PM Date by via Verbal Voice Mail Other Ontacted PM Date by via Verbal voice Mail Other Ontacted PM Date were received after the recommended holding time had expired. mple(s) were received after the recommended holding time had expired. mple(s) were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION	2. Are these work share samples and all listed on the COC? 3. Yes (D) 3. Were all preserved sample(s) at the correct pH upon receipt? 4. Were vOAs on the COC? 5. Were air bubbles >6 mm in any VOA vials? 5. Were air bubbles >6 mm in any VOA vials? 5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes (No 3. Was a LL Hg or Me Hg trip blank present? 4. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES 5. SAMPLE CONDITION 5. Mare received after the recommended holding time had expired. 5. mple(s) 5. mple(s) 5. were received after the recommended holding time had expired. 5. mple(s) 5. mpl	). Were correct bottle(s) used for the test(s) indicated?	Yes No
If yes, Questions 13-17 have been checked at the originating laboratory. Were all preserved sample(s) at the correct pH upon receipt? Were VOAs on the COC? Uses No Were VOAs on the COC? Uses No Were air bubbles >6 mm in any VOA vials? Uses No Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No Was a LL Hg or Me Hg trip blank present? Uses No Was a LL Hg or Me Hg trip blank present? CHAIN OF CUSTODY & SAMPLE DISCREPANCIES SAMPLE CONDITION mple(s)were received after the recommended holding time had expired. mple(s)were received with bubble >6 mm in diameter. (Notify PM) SAMPLE PRESERVATION	If yes, Questions 13-17 have been checked at the originating laboratory. Were all preserved sample(s) at the correct pH upon receipt? Were vOAs on the COC? Were air bubbles >6 mm in any VOA vials? Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #		Yes No
b. Were all preserved sample(s) at the correct pH upon receipt? Yes No (M) pH Strip Lot# HC316719   b. Were VOAs on the COC? Yes No   b. Were air bubbles >6 mm in any VOA vials? Image Larger than this.   b. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No Yes No   b. Was a LL Hg or Me Hg trip blank present? Yes No   c. Was a LL Hg or Me Hg trip blank present? Yes No   c. Was a LL Hg or Me Hg trip blank present? Yes No   c. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES I additional next page   c. SAMPLE CONDITION were received after the recommended holding time had expired.   mple(s) were received with bubble >6 mm in diameter. (Notify PM)   SAMPLE PRESERVATION	b. Were all preserved sample(s) at the correct pH upon receipt? b. Were VOAs on the COC? b. Were VOAs on the COC? b. Were air bubbles >6 mm in any VOA vials? b. Was a VOA trip blank present in the cooler(s)? b. Was a VOA trip blank present in the cooler(s)? b. Was a LL Hg or Me Hg trip blank present? byYes No by	2. Are these work share samples and all listed on the COC?	Yes No
4. Were VOAs on the COC?   9. Were air bubbles >6 mm in any VOA vials?   9. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No   9. Was a LL Hg or Me Hg trip blank present?   9. Was a LL Hg or Me Hg trip blank	4. Were VOAs on the COC? Yes   5. Were air bubbles >6 mm in any VOA vials? Image: Larger than this.   6. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No   7. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? Yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. Was a LL Hg or Me Hg trip blank present? yes No   9. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page   9. SAMPLE CONDITION were received after the recommended holding time had expired.   9. mple(s) were received after the recommended holding time had expired.   9. were received with bubble >6 mm in diameter. (Notify PM)   8. SAMPLE PRESERVATION   9. mple(s) were further preserved in the laboratory.   9. me preserved: Preservative(s) added/Lot number(s):	If yes, Questions 13-17 have been checked at the originating laborator	ry.
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Login	#	č D	194826
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			Eurofins - Canton	Sample Receipt Mi	ultiple Cooler Form	
Coo	oler Desi	cription	IR Gun #	Observed	Corrected	Coolant
$\sim$	(Circl		(Circle)	Temp °C	Temp °C	(Circle)
10		ox Other	IR GUN #:	1.5	2.6	Wet Ice Blue Ice Dry Ic Water None
Eg	Client B	ox Other	IR GUN #:	18	2.9	Wet Ice Blue Ice Dry Ice Water None
EC EC	Client B	ox Other	IR GUN #:	<u> </u>		Wet ice Blue ice Dry ice Water None
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FC C	lient Bo	x Other	IR GUN #:		an Charles and C	Wet ice Blue ice Dry ice Water None
EC C	lient So	c Other	IR GUN #:			Wet ice Blue ice Dry ice Water None
FC CI	lient Box	<b>Other</b>	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

### **DATA VERIFICATION REPORT**



November 15, 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: 194826-1 Sample date: 2023-11-02 Report received by CADENA: 2023-11-15 Initial Data Verification completed by CADENA: 2023-11-15 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.

The following minor QC exceptions or missing information were noted:

SRN - Sample Receipt Non-conformance(headspace) - Sample -002 results for GCMS VOC should be considered to be estimated and qualified with UJ flags if non-detect due to sample receipt non-conformance that affects the integrity of the sample. See laboratory submittal sample receipt forms for details.

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 Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

## **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.

## **Qualified Results Summary**

### CADENA Project ID: E203631 Laboratory: Eurofins Environment Testing LLC - Cleveland Laboratory Submittal: 194826-1

ort	Valid			
it Units	Qualifier			
) ug/l	UJ			
) ug/l	UJ			
) ug/l	UJ			
) ug/l	UJ			
) ug/l	UJ			
) ug/l	UJ			
	0 ug/l 0 ug/l 0 ug/l 0 ug/l			

## Analytical Results Summary

CADENA Project ID: E203631

Laboratory: Eurofins Environment Testing LLC - Cleveland Laboratory Submittal: 194826-1

		Sample Name: Lab Sample ID: Sample Date:	TRIP BLANK_12 2401948261 11/2/2023							
				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	UJ
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l		ND	1.0	ug/l	UJ
	Tetrachloroethene	127-18-4	ND	1.0	ug/l		ND	1.0	ug/l	UJ
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l		ND	1.0	ug/l	UJ
	Trichloroethene	79-01-6	ND	1.0	ug/l		ND	1.0	ug/l	UJ
	Vinyl chloride	75-01-4	ND	1.0	ug/l		ND	1.0	ug/l	UJ
<u>OSW-826</u>	DDSIM									
	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 # 240-194826-1 CADENA Verification Report: 2023-11-15

Analyses Performed By: Eurofins Cleveland Barberton, Ohio

Report # 52099R Review Level: Tier III Project: 30167538.402.02

### **SUMMARY**

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-194826-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) include a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample	Barant Sampla	Analysis			
Sample ID		Matrix	Collection Date	Parent Sample	VOC	VOC SIM		
TRIP BLANK_12	240-194826-1	Water	11/02/2023		Х			
MW-118S_110223	240-194826-2	Water	11/02/2023		Х	Х		

### ANALYTICAL DATA PACKAGE DOCUMENTATION

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

	Items Reviewed	Rep	orted		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		X	
5.	Reporting limits		Х		Х	
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. Sample Receipt Condition

The laboratory received VOC vials with significant headspace for sample MW-118S\_110223 (240-194826-2). In case of any deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
Bubbles in VOC vials > 6 mm	Non-detect	UJ
	Detect	J

### 3. 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.

### 4. 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.

### 4.1 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.

### 4.2 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.

### 5. 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.

### 6. 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.

### 7. 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.

### 8. 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

Yes X X X X X X X X	X	Yes X X X	Required
X X X X	X	X	
X X X X	X	X	
X X X X	X	X	
X X		X	
X X		X	
X			
		X	
Х			
		Х	
Х		Х	
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-	X X X X X	X X X X X X X	X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

Bindu Sree M B
BASHMB
December 05, 2023

PEER REVIEW: Andrew Korycinski

DATE: December 11, 2023

# CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS



### **Chain of Custody Record**



TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-276

Client Contact	•	atory location: tory program:			DV				DES	200		RCR			Othe		2103							т	EL EASER & NVH NM % A YEST?
Company Name: Arcadis	Client Project	Manager: Kris	18				<b>C</b>			~			_	t											TestAmerica Laboratories, In
ddress: 28550 Cabot Drive, Suite 500		0	minsk	ey							istina		iver				Lab (	Conta	ct: Mi	ike De	lMoni	co			COC No:
ity/State/Zip: Novi, MI, 48377	Telephone: 248	8-994-2240					Te	lepho	one: 248-994-2240						Telephone: 330-497-9396						4				
hone: 248-994-2240	Email: kristofi	fer.hinskey@ar	cadis.	com				An	alysis	Turi	narour	d Ti	me				Analyses						1 of 1 COCs For lab use only		
	Sampler Name	2:					TA	T if d	ifferent	trom t		Ľ											Walk-in client		
roject Name: Ford LTP Off-Site	ر ا	テ チッン	TH	r				3 weeks 10 day ~ 2 weeks														T ah annalia a			
oject Number: 30167538.402.04	Method of Ship	oment/Carrier:									1 wee 2 day			Î	ဖူ							MIG			Lab sampling
D # 30167538.402.04	Shipping/Tracl	king No:	1	x	latrix				ntalua	P.	1 day			Filtered Sample (Y / N)	C/Grab	50D	8260D	Trans-1,2-DCE 8260D			Vinyl Chloride 8260D	1,4-Dioxane 8260D SIM			Job/SDG No:
			- in the second	ann fàr		cipela ita e	and rate			is a	Treser	vauv	<b>e</b> 5	l San	site=	E 82(	DCE	,2-D	60D	60D	lorid	ane			
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment Solid	Other:	H2SO4	HN03	HCI	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtere	Composite	1,1-DCE 8260D	cis-1,2-DCE	Trans-1	PCE 8260D	TCE 8260D	Vinyl CI	1,4-Dio			Sample Specific Notes / Special Instructions:
TRIP BLANK_ 12				1					1					Ν	G	Х	Х	х	X	X	X				1 Trip Blank
MW- 1185_ 110223	11-2-23	0958		6			_		6					Ν	G	γ	x	X	X	X	X	X			3 VOAs for 8260D 3 VOAs for 8260D SIM
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Possible Hazard Identification → Non-Hazard Flammable Skin Irritar	L	L				_	-	Sam	ple Di	spos	al ( A 1	fee n	ay be a	assess	ed if	samp	les ar	e reta	ined l	onger	than	month)			190
ecial Instructions/QC Requirements & Comments: ample Address: 12124 Bo5TDN PD5T ubmit all results through Cadena at jtomalia@cadenaco.o evel IV Reporting requested.			Unki	nown				I	Retu	rn to	Chent		₩ D	Disposa	al By	Lab			Archiv	e For	in an	Months			
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1908, TestAmerica Laboratories, Inc. All rights reserved gNmerica & Design <sup>10</sup> are trademarks of TestAmerica Laboratories. Inc.											~		0		~~~					-1					
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### Client Sample ID: TRIP BLANK\_12

### Date Collected: 11/02/23 00:00

Date Received: 11/04/23 08:00

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			11/11/23 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/11/23 18:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/11/23 18:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/11/23 18:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/11/23 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		62 - 137	11	1/11/23 18:22	1
4-Bromofluorobenzene (Surr)	75		56 - 136	11	1/11/23 18:22	1
Toluene-d8 (Surr)	88		78 - 122	11	1/11/23 18:22	1
Dibromofluoromethane (Surr)	92		73 - 120	11	1/11/23 18:22	1

### Client Sample ID: MW-118S\_110223 Date Collected: 11/02/23 09:58 Date Received: 11/04/23 08:00

Analyte

Matrix: Water Method: SW846 8260D SIM - Volatile Organic Compounds (GC/MS) Result Qualifier MDL Unit RL П Prepared Analyzed Dil Fac

1,4-Dioxane	2.0	U	2.0	0.86 ug/L	_ <u> </u>	11/14/23 01:28	1
Surrogate 1,2-Dichloroethane-d4 (Surr)	%Recovery 94	Qualifier	Limits 66 - 120		Prepared	Analyzed 11/14/23 01:28	Dil Fac

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	h nî	1.0	0.49	ug/L			11/11/23 22:55	1
cis-1,2-Dichloroethene	1.0	ΨŢ	1.0	0.46	ug/L			11/11/23 22:55	1
Tetrachloroethene	1.0	ψ	1.0	0.44	ug/L			11/11/23 22:55	1
trans-1,2-Dichloroethene	1.0	Ψ	1.0	0.51	ug/L			11/11/23 22:55	1
Trichloroethene	1.0	ψ	1.0	0.44	ug/L			11/11/23 22:55	1
Vinyl chloride	1.0	ψ ↓	1.0	0.45	ug/L			11/11/23 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surroyate	/anecovery	Quaimer	LIIIIIIS	Fiepa	neu /	anaiyzeu	DIIFac	
1,2-Dichloroethane-d4 (Surr)	107		62 - 137		11/	11/23 22:55	1	
4-Bromofluorobenzene (Surr)	75		56 - 136		11/	11/23 22:55	1	
Toluene-d8 (Surr)	90		78 - 122		11/	11/23 22:55	1	
Dibromofluoromethane (Surr)	92		73 - 120		11/	11/23 22:55	1	

### Lab Sample ID: 240-194826-1 Matrix: Water

Lab Sample ID: 240-194826-2