

## ANALYTICAL REPORT

Eurofins TestAmerica, Canton  
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North Canton, OH 44720  
Tel: (330)497-9396

Laboratory Job ID: 240-140110-1  
Client Project/Site: Ford LTP - On Site

For:  
ARCADIS U.S., Inc.  
28550 Cabot Drive  
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Novi, Michigan 48377

Attn: Kristoffer Hinskey



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Authorized for release by:  
11/30/2020 8:44:19 AM

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*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Job ID: 240-140110-1**

**Laboratory: Eurofins TestAmerica, Canton**

**Narrative**

## CASE NARRATIVE

**Client: ARCADIS U.S., Inc.**

**Project: Ford LTP - On Site**

**Report Number: 240-140110-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

### **RECEIPT**

The samples were received on 11/13/2020 9:15 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

### **VOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples TRIP BLANK (240-140110-1), MW-64\_111020 (240-140110-2), MW-69\_111020 (240-140110-3), MW-20\_111020 (240-140110-4), MW-09\_111020 (240-140110-5), LMW-20-23\_111020 (240-140110-6) and MW-14\_111020 (240-140110-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/21/2020 and 11/23/2020.

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

### **VOLATILE ORGANIC COMPOUNDS (GCMS SIM)**

Samples MW-64\_111020 (240-140110-2), MW-69\_111020 (240-140110-3), MW-20\_111020 (240-140110-4), MW-09\_111020 (240-140110-5), LMW-20-23\_111020 (240-140110-6) and MW-14\_111020 (240-140110-7) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 11/20/2020.

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

# Method Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

**Protocol References:**

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

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-140110-1	TRIP BLANK	Water	11/10/20 00:00	11/13/20 09:15	
240-140110-2	MW-64_111020	Water	11/10/20 09:08	11/13/20 09:15	
240-140110-3	MW-69_111020	Water	11/10/20 10:05	11/13/20 09:15	
240-140110-4	MW-20_111020	Water	11/10/20 11:35	11/13/20 09:15	
240-140110-5	MW-09_111020	Water	11/10/20 12:40	11/13/20 09:15	
240-140110-6	LMW-20-23_111020	Water	11/10/20 13:48	11/13/20 09:15	
240-140110-7	MW-14_111020	Water	11/10/20 15:03	11/13/20 09:15	

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# Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

## Client Sample ID: TRIP BLANK

Lab Sample ID: 240-140110-1

No Detections.

## Client Sample ID: MW-64\_111020

Lab Sample ID: 240-140110-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.32	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	4.3		1.0	0.20	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-69\_111020

Lab Sample ID: 240-140110-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.26	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	3.8		1.0	0.20	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-20\_111020

Lab Sample ID: 240-140110-4

No Detections.

## Client Sample ID: MW-09\_111020

Lab Sample ID: 240-140110-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.0		2.0	0.86	ug/L	1		8260B SIM	Total/NA
Vinyl chloride	1.8		1.0	0.20	ug/L	1		8260B	Total/NA

## Client Sample ID: LMW-20-23\_111020

Lab Sample ID: 240-140110-6

No Detections.

## Client Sample ID: MW-14\_111020

Lab Sample ID: 240-140110-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-140110-1**

**Date Collected: 11/10/20 00:00**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 20:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/21/20 20:20	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/21/20 20:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 20:20	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/21/20 20:20	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/21/20 20:20	1
2-Methylnaphthalene	5.0	U	5.0	2.4	ug/L			11/21/20 20:20	1
Naphthalene	1.0	U	1.0	0.32	ug/L			11/21/20 20:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	115		75 - 130					11/21/20 20:20	1
4-Bromofluorobenzene (Surr)	101		47 - 134					11/21/20 20:20	1
Toluene-d8 (Surr)	100		69 - 122					11/21/20 20:20	1
Dibromofluoromethane (Surr)	92		78 - 129					11/21/20 20:20	1



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-64\_111020**

**Lab Sample ID: 240-140110-2**

Date Collected: 11/10/20 09:08

Matrix: Water

Date Received: 11/13/20 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/20/20 12:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 133					11/20/20 12:50	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 12:22	1
<b>cis-1,2-Dichloroethene</b>	<b>0.32</b>	<b>J</b>	1.0	0.16	ug/L			11/23/20 12:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 12:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 12:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 12:22	1
<b>Vinyl chloride</b>	<b>4.3</b>		1.0	0.20	ug/L			11/23/20 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 130					11/23/20 12:22	1
4-Bromofluorobenzene (Surr)	105		47 - 134					11/23/20 12:22	1
Toluene-d8 (Surr)	101		69 - 122					11/23/20 12:22	1
Dibromofluoromethane (Surr)	93		78 - 129					11/23/20 12:22	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-69\_111020**

**Lab Sample ID: 240-140110-3**

Date Collected: 11/10/20 10:05

Matrix: Water

Date Received: 11/13/20 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.9		2.0	0.86	ug/L			11/20/20 13:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 133					11/20/20 13:15	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 12:47	1
cis-1,2-Dichloroethene	0.26	J	1.0	0.16	ug/L			11/23/20 12:47	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 12:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 12:47	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 12:47	1
Vinyl chloride	3.8		1.0	0.20	ug/L			11/23/20 12:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 130					11/23/20 12:47	1
4-Bromofluorobenzene (Surr)	102		47 - 134					11/23/20 12:47	1
Toluene-d8 (Surr)	100		69 - 122					11/23/20 12:47	1
Dibromofluoromethane (Surr)	90		78 - 129					11/23/20 12:47	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-20\_111020**

**Lab Sample ID: 240-140110-4**

**Date Collected: 11/10/20 11:35**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/20/20 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 133		11/20/20 13:41	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 13:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/23/20 13:11	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 13:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 13:11	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 13:11	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/23/20 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 130		11/23/20 13:11	1
4-Bromofluorobenzene (Surr)	103		47 - 134		11/23/20 13:11	1
Toluene-d8 (Surr)	100		69 - 122		11/23/20 13:11	1
Dibromofluoromethane (Surr)	91		78 - 129		11/23/20 13:11	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-09\_111020**

**Lab Sample ID: 240-140110-5**

Date Collected: 11/10/20 12:40

Matrix: Water

Date Received: 11/13/20 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0		2.0	0.86	ug/L			11/20/20 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 133		11/20/20 14:06	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 13:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/23/20 13:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 13:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 13:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 13:36	1
Vinyl chloride	1.8		1.0	0.20	ug/L			11/23/20 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 130		11/23/20 13:36	1
4-Bromofluorobenzene (Surr)	104		47 - 134		11/23/20 13:36	1
Toluene-d8 (Surr)	100		69 - 122		11/23/20 13:36	1
Dibromofluoromethane (Surr)	94		78 - 129		11/23/20 13:36	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: LMW-20-23\_111020**

**Lab Sample ID: 240-140110-6**

**Date Collected: 11/10/20 13:48**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/20/20 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 133		11/20/20 14:31	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 14:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/23/20 14:01	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 14:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 14:01	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 14:01	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/23/20 14:01	1
2-Methylnaphthalene	5.0	U	5.0	2.4	ug/L			11/23/20 14:01	1
Naphthalene	1.0	U	1.0	0.32	ug/L			11/23/20 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 130		11/23/20 14:01	1
4-Bromofluorobenzene (Surr)	103		47 - 134		11/23/20 14:01	1
Toluene-d8 (Surr)	100		69 - 122		11/23/20 14:01	1
Dibromofluoromethane (Surr)	94		78 - 129		11/23/20 14:01	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-14\_111020**

**Lab Sample ID: 240-140110-7**

**Date Collected: 11/10/20 15:03**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/20/20 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 133					11/20/20 14:56	1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 14:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/23/20 14:25	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 14:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 14:25	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 14:25	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/23/20 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 130					11/23/20 14:25	1
4-Bromofluorobenzene (Surr)	104		47 - 134					11/23/20 14:25	1
Toluene-d8 (Surr)	101		69 - 122					11/23/20 14:25	1
Dibromofluoromethane (Surr)	94		78 - 129					11/23/20 14:25	1

# Surrogate Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-140110-1	TRIP BLANK	115	101	100	92
240-140110-2	MW-64_111020	113	105	101	93
240-140110-3	MW-69_111020	112	102	100	90
240-140110-4	MW-20_111020	111	103	100	91
240-140110-5	MW-09_111020	111	104	100	94
240-140110-6	LMW-20-23_111020	114	103	100	94
240-140110-7	MW-14_111020	115	104	101	94
240-140141-C-3 MS	Matrix Spike	102	109	105	82
240-140141-C-3 MSD	Matrix Spike Duplicate	101	108	105	81
240-140259-F-3 MS	Matrix Spike	102	109	101	83
240-140259-I-3 MSD	Matrix Spike Duplicate	100	108	101	82
LCS 240-462197/5	Lab Control Sample	99	108	103	82
LCS 240-462350/5	Lab Control Sample	101	110	104	85
MB 240-462197/8	Method Blank	113	104	102	93
MB 240-462350/8	Method Blank	110	103	100	89

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
TOL = Toluene-d8 (Surr)  
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		DCA (70-133)
240-140110-2	MW-64_111020	87
240-140110-3	MW-69_111020	87
240-140110-4	MW-20_111020	87
240-140110-5	MW-09_111020	86
240-140110-6	LMW-20-23_111020	86
240-140110-7	MW-14_111020	90
240-140110-7 MS	MW-14_111020	90
240-140110-7 MSD	MW-14_111020	86
LCS 240-462014/4	Lab Control Sample	86
MB 240-462014/5	Method Blank	85

### Surrogate Legend

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

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

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

**Lab Sample ID: MB 240-462197/8**  
**Matrix: Water**  
**Analysis Batch: 462197**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 12:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/21/20 12:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/21/20 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 12:04	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/21/20 12:04	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/21/20 12:04	1
2-Methylnaphthalene	5.0	U	5.0	2.4	ug/L			11/21/20 12:04	1
Naphthalene	1.0	U	1.0	0.32	ug/L			11/21/20 12:04	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	113		75 - 130		11/21/20 12:04	1
4-Bromofluorobenzene (Surr)	104		47 - 134		11/21/20 12:04	1
Toluene-d8 (Surr)	102		69 - 122		11/21/20 12:04	1
Dibromofluoromethane (Surr)	93		78 - 129		11/21/20 12:04	1

**Lab Sample ID: LCS 240-462197/5**  
**Matrix: Water**  
**Analysis Batch: 462197**

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1-Dichloroethene	20.0	18.2		ug/L		91	73 - 129
cis-1,2-Dichloroethene	20.0	19.1		ug/L		95	75 - 124
Tetrachloroethene	20.0	17.5		ug/L		88	70 - 125
trans-1,2-Dichloroethene	20.0	18.8		ug/L		94	74 - 130
Trichloroethene	20.0	16.3		ug/L		81	71 - 121
Vinyl chloride	20.0	20.4		ug/L		102	61 - 134
Naphthalene	20.0	18.5		ug/L		93	28 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		75 - 130
4-Bromofluorobenzene (Surr)	108		47 - 134
Toluene-d8 (Surr)	103		69 - 122
Dibromofluoromethane (Surr)	82		78 - 129

**Lab Sample ID: 240-140141-C-3 MS**  
**Matrix: Water**  
**Analysis Batch: 462197**

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

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	5000	U	100000	88500		ug/L		88	64 - 132
cis-1,2-Dichloroethene	2000	J	100000	93300		ug/L		91	68 - 121
Tetrachloroethene	5000	U	100000	78400		ug/L		78	52 - 129
Trichloroethene	200000		100000	264000		ug/L		59	56 - 124
Vinyl chloride	5000	U	100000	92700		ug/L		93	49 - 136

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		75 - 130

Eurofins TestAmerica, Canton



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

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

**Lab Sample ID: 240-140141-C-3 MS**  
**Matrix: Water**  
**Analysis Batch: 462197**

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	109		47 - 134
Toluene-d8 (Surr)	105		69 - 122
Dibromofluoromethane (Surr)	82		78 - 129

**Lab Sample ID: 240-140141-C-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 462197**

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,1-Dichloroethene	5000	U	100000	93300		ug/L		93	64 - 132	5	35
cis-1,2-Dichloroethene	2000	J	100000	101000		ug/L		99	68 - 121	8	35
Tetrachloroethene	5000	U	100000	85900		ug/L		86	52 - 129	9	35
Trichloroethene	200000		100000	277000		ug/L		73	56 - 124	5	35
Vinyl chloride	5000	U	100000	97100		ug/L		97	49 - 136	5	35

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	101		75 - 130
4-Bromofluorobenzene (Surr)	108		47 - 134
Toluene-d8 (Surr)	105		69 - 122
Dibromofluoromethane (Surr)	81		78 - 129

**Lab Sample ID: MB 240-462350/8**  
**Matrix: Water**  
**Analysis Batch: 462350**

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

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 11:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/23/20 11:57	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/23/20 11:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/23/20 11:57	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/23/20 11:57	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/23/20 11:57	1
2-Methylnaphthalene	5.0	U	5.0	2.4	ug/L			11/23/20 11:57	1
Naphthalene	1.0	U	1.0	0.32	ug/L			11/23/20 11:57	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	110		75 - 130		11/23/20 11:57	1
4-Bromofluorobenzene (Surr)	103		47 - 134		11/23/20 11:57	1
Toluene-d8 (Surr)	100		69 - 122		11/23/20 11:57	1
Dibromofluoromethane (Surr)	89		78 - 129		11/23/20 11:57	1

**Lab Sample ID: LCS 240-462350/5**  
**Matrix: Water**  
**Analysis Batch: 462350**

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

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1-Dichloroethene	20.0	19.4		ug/L		97	73 - 129
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	75 - 124

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

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

Lab Sample ID: LCS 240-462350/5

Matrix: Water

Analysis Batch: 462350

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	18.2		ug/L		91	70 - 125
trans-1,2-Dichloroethene	20.0	19.5		ug/L		97	74 - 130
Trichloroethene	20.0	16.5		ug/L		82	71 - 121
Vinyl chloride	20.0	23.4		ug/L		117	61 - 134
Naphthalene	20.0	16.8		ug/L		84	28 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		75 - 130
4-Bromofluorobenzene (Surr)	110		47 - 134
Toluene-d8 (Surr)	104		69 - 122
Dibromofluoromethane (Surr)	85		78 - 129

Lab Sample ID: 240-140259-F-3 MS

Matrix: Water

Analysis Batch: 462350

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	20.0	18.0		ug/L		90	64 - 132
cis-1,2-Dichloroethene	1.0	U	20.0	18.5		ug/L		92	68 - 121
Tetrachloroethene	1.0	U	20.0	15.5		ug/L		78	52 - 129
trans-1,2-Dichloroethene	1.0	U	20.0	18.0		ug/L		90	69 - 126
Trichloroethene	1.0	U	20.0	14.8		ug/L		74	56 - 124
Vinyl chloride	1.0	U	20.0	23.4		ug/L		117	49 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		75 - 130
4-Bromofluorobenzene (Surr)	109		47 - 134
Toluene-d8 (Surr)	101		69 - 122
Dibromofluoromethane (Surr)	83		78 - 129

Lab Sample ID: 240-140259-I-3 MSD

Matrix: Water

Analysis Batch: 462350

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	20.0	19.7		ug/L		98	64 - 132	9	35
cis-1,2-Dichloroethene	1.0	U	20.0	19.6		ug/L		98	68 - 121	6	35
Tetrachloroethene	1.0	U	20.0	17.8		ug/L		89	52 - 129	14	35
trans-1,2-Dichloroethene	1.0	U	20.0	19.6		ug/L		98	69 - 126	9	35
Trichloroethene	1.0	U	20.0	16.5		ug/L		83	56 - 124	11	35
Vinyl chloride	1.0	U	20.0	22.4		ug/L		112	49 - 136	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		75 - 130
4-Bromofluorobenzene (Surr)	108		47 - 134
Toluene-d8 (Surr)	101		69 - 122
Dibromofluoromethane (Surr)	82		78 - 129

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

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

**Lab Sample ID: MB 240-462014/5**  
**Matrix: Water**  
**Analysis Batch: 462014**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/20/20 10:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 133					11/20/20 10:44	1

**Lab Sample ID: LCS 240-462014/4**  
**Matrix: Water**  
**Analysis Batch: 462014**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	10.4		ug/L		104	80 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	86		70 - 133				

**Lab Sample ID: 240-140110-7 MS**  
**Matrix: Water**  
**Analysis Batch: 462014**

**Client Sample ID: MW-14\_111020**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.0	U	10.0	10.9		ug/L		109	46 - 170
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	90		70 - 133						

**Lab Sample ID: 240-140110-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 462014**

**Client Sample ID: MW-14\_111020**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	46 - 170	1	26
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	86		70 - 133								

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

## GC/MS VOA

### Analysis Batch: 462014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140110-2	MW-64_111020	Total/NA	Water	8260B SIM	
240-140110-3	MW-69_111020	Total/NA	Water	8260B SIM	
240-140110-4	MW-20_111020	Total/NA	Water	8260B SIM	
240-140110-5	MW-09_111020	Total/NA	Water	8260B SIM	
240-140110-6	LMW-20-23_111020	Total/NA	Water	8260B SIM	
240-140110-7	MW-14_111020	Total/NA	Water	8260B SIM	
MB 240-462014/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-462014/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-140110-7 MS	MW-14_111020	Total/NA	Water	8260B SIM	
240-140110-7 MSD	MW-14_111020	Total/NA	Water	8260B SIM	

### Analysis Batch: 462197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140110-1	TRIP BLANK	Total/NA	Water	8260B	
MB 240-462197/8	Method Blank	Total/NA	Water	8260B	
LCS 240-462197/5	Lab Control Sample	Total/NA	Water	8260B	
240-140141-C-3 MS	Matrix Spike	Total/NA	Water	8260B	
240-140141-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

### Analysis Batch: 462350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140110-2	MW-64_111020	Total/NA	Water	8260B	
240-140110-3	MW-69_111020	Total/NA	Water	8260B	
240-140110-4	MW-20_111020	Total/NA	Water	8260B	
240-140110-5	MW-09_111020	Total/NA	Water	8260B	
240-140110-6	LMW-20-23_111020	Total/NA	Water	8260B	
240-140110-7	MW-14_111020	Total/NA	Water	8260B	
MB 240-462350/8	Method Blank	Total/NA	Water	8260B	
LCS 240-462350/5	Lab Control Sample	Total/NA	Water	8260B	
240-140259-F-3 MS	Matrix Spike	Total/NA	Water	8260B	
240-140259-I-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-140110-1**

**Date Collected: 11/10/20 00:00**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462197	11/21/20 20:20	HMB	TAL CAN

**Client Sample ID: MW-64\_111020**

**Lab Sample ID: 240-140110-2**

**Date Collected: 11/10/20 09:08**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462350	11/23/20 12:22	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 12:50	SAM	TAL CAN

**Client Sample ID: MW-69\_111020**

**Lab Sample ID: 240-140110-3**

**Date Collected: 11/10/20 10:05**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462350	11/23/20 12:47	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 13:15	SAM	TAL CAN

**Client Sample ID: MW-20\_111020**

**Lab Sample ID: 240-140110-4**

**Date Collected: 11/10/20 11:35**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462350	11/23/20 13:11	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 13:41	SAM	TAL CAN

**Client Sample ID: MW-09\_111020**

**Lab Sample ID: 240-140110-5**

**Date Collected: 11/10/20 12:40**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462350	11/23/20 13:36	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 14:06	SAM	TAL CAN

**Client Sample ID: LMW-20-23\_111020**

**Lab Sample ID: 240-140110-6**

**Date Collected: 11/10/20 13:48**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462350	11/23/20 14:01	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 14:31	SAM	TAL CAN

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

**Client Sample ID: MW-14\_111020**

**Lab Sample ID: 240-140110-7**

**Date Collected: 11/10/20 15:03**

**Matrix: Water**

**Date Received: 11/13/20 09:15**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	462350	11/23/20 14:25	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462014	11/20/20 14:56	SAM	TAL CAN

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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# Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP - On Site

Job ID: 240-140110-1

## Laboratory: Eurofins TestAmerica, Canton

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	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20





Canton Facility \_\_\_\_\_  
 Client Arcoadis Site Name \_\_\_\_\_  
 Cooler Received on 11-12-20 Opened on 11-12-20 Cooler unpacked by: [Signature]  
 FedEx: 1<sup>st</sup>  Grd  Exp  UPS  FAS  Clipper  Client Drop Off  TestAmerica Courier  Other \_\_\_\_\_

**Receipt After-hours: Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_**

TestAmerica Cooler # 174  Foam Box  Client Cooler  Box  Other \_\_\_\_\_  
 Packing material used:  Bubble Wrap  Foam  Plastic Bag  None  Other \_\_\_\_\_  
 COOLANT:  Wet Ice  Blue Ice  Dry Ice  Water  None

1. Cooler temperature upon receipt  See Multiple Cooler Form  
 IR GUN # IR-11 (CF +0.9 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 2.1 °C  
 IR GUN # IR-12 (CF +0.5 °C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2  Yes  No  
 -Were the seals on the outside of the cooler(s) signed & dated?  Yes  No  NA  
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?  Yes  No  NA  
 -Were tamper/custody seals intact and uncompromised?  Yes  No  NA
3. Shippers' packing slip attached to the cooler(s)?  Yes  No
4. Did custody papers accompany the sample(s)?  Yes  No
5. Were the custody papers relinquished & signed in the appropriate place?  Yes  No
6. Was/were the person(s) who collected the samples clearly identified on the COC?  Yes  No
7. Did all bottles arrive in good condition (Unbroken)?  Yes  No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?  Yes  No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?  Yes  No
10. Were correct bottle(s) used for the test(s) indicated?  Yes  No
11. Sufficient quantity received to perform indicated analyses?  Yes  No
12. Are these work share samples and all listed on the COC?  Yes  No  
 If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt?  Yes  No  NA pH Strip Lot# HC907861
14. Were VOAs on the COC?  Yes  No  NA
15. Were air bubbles >6 mm in any VOA vials?  Yes  No  NA ● ← Larger than this.
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_  Yes  No
17. Was a LL Hg or Me Hg trip blank present? \_\_\_\_\_  Yes  No

Tests that are not checked for pH by Receiving:  
  
 VOAs  
 Oil and Grease  
 TOC

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_  
 Concerning \_\_\_\_\_

**18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**  additional next page Samples processed by: \_\_\_\_\_

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**19. SAMPLE CONDITION**  
 Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.  
 Sample(s) \_\_\_\_\_ were received in a broken container.  
 Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter. (Notify PM)

**20. SAMPLE PRESERVATION**  
 Sample(s) \_\_\_\_\_ were further preserved in the laboratory.  
 Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_  
 VOA Sample Preservation - Date/Time VOAs Frozen: \_\_\_\_\_