

## ANALYTICAL REPORT

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

Laboratory Job ID: 240-140387-1  
Client Project/Site: Ford LTP - On Site

For:  
ARCADIS U.S., Inc.  
28550 Cabot Drive  
Suite 500  
Novi, Michigan 48377

Attn: Kristoffer Hinskey



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Authorized for release by:  
12/2/2020 8:52:25 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: 240-140387-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
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: 240-140387-1

**Job ID: 240-140387-1**

**Laboratory: Eurofins TestAmerica, Canton**

**Narrative**

## CASE NARRATIVE

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

**Project: Ford LTP - On Site**

**Report Number: 240-140387-1**

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 11/17/2020 9:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8° C and 2.4° C.

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

Samples TRIP BLANK (240-140387-1), MW-15-61D\_111420 (240-140387-2), MW-213S\_111420 (240-140387-3), MW-43\_111420 (240-140387-4), MW-52\_111420 (240-140387-5) and MW-120\_111420 (240-140387-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/25/2020 and 11/27/2020.

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-15-61D\_111420 (240-140387-2), MW-213S\_111420 (240-140387-3), MW-43\_111420 (240-140387-4), MW-52\_111420 (240-140387-5) and MW-120\_111420 (240-140387-6) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 11/23/2020.

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: 240-140387-1

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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- 13
- 14

# Sample Summary

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

Job ID: 240-140387-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-140387-1	TRIP BLANK	Water	11/14/20 00:00	11/17/20 09:10	
240-140387-2	MW-15-61D_111420	Water	11/14/20 09:16	11/17/20 09:10	
240-140387-3	MW-213S_111420	Water	11/14/20 10:40	11/17/20 09:10	
240-140387-4	MW-43_111420	Water	11/14/20 12:02	11/17/20 09:10	
240-140387-5	MW-52_111420	Water	11/14/20 12:57	11/17/20 09:10	
240-140387-6	MW-120_111420	Water	11/14/20 14:19	11/17/20 09:10	

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# Detection Summary

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

Job ID: 240-140387-1

## Client Sample ID: TRIP BLANK

Lab Sample ID: 240-140387-1

No Detections.

## Client Sample ID: MW-15-61D\_111420

Lab Sample ID: 240-140387-2

No Detections.

## Client Sample ID: MW-213S\_111420

Lab Sample ID: 240-140387-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	0.92	J	1.0	0.20	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-43\_111420

Lab Sample ID: 240-140387-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA

## Client Sample ID: MW-52\_111420

Lab Sample ID: 240-140387-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	3.5		1.0	0.20	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-120\_111420

Lab Sample ID: 240-140387-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.2		1.0	0.10	ug/L	1		8260B	Total/NA

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: 240-140387-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-140387-1**

**Date Collected: 11/14/20 00:00**

**Matrix: Water**

**Date Received: 11/17/20 09:10**

**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			11/25/20 17:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/25/20 17:27	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/25/20 17:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/25/20 17:27	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/25/20 17:27	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/25/20 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		75 - 130		11/25/20 17:27	1
4-Bromofluorobenzene (Surr)	97		47 - 134		11/25/20 17:27	1
Toluene-d8 (Surr)	104		69 - 122		11/25/20 17:27	1
Dibromofluoromethane (Surr)	93		78 - 129		11/25/20 17:27	1



# Client Sample Results

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

Job ID: 240-140387-1

**Client Sample ID: MW-15-61D\_111420**

**Lab Sample ID: 240-140387-2**

Date Collected: 11/14/20 09:16

Matrix: Water

Date Received: 11/17/20 09:10

**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			11/23/20 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 133		11/23/20 12:15	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			11/25/20 17:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/25/20 17:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/25/20 17:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/25/20 17:52	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/25/20 17:52	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/25/20 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		75 - 130		11/25/20 17:52	1
4-Bromofluorobenzene (Surr)	84		47 - 134		11/25/20 17:52	1
Toluene-d8 (Surr)	88		69 - 122		11/25/20 17:52	1
Dibromofluoromethane (Surr)	96		78 - 129		11/25/20 17:52	1

# Client Sample Results

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

Job ID: 240-140387-1

**Client Sample ID: MW-213S\_111420**

**Lab Sample ID: 240-140387-3**

Date Collected: 11/14/20 10:40

Matrix: Water

Date Received: 11/17/20 09:10

**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			11/23/20 22:43	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)	89		70 - 133					11/23/20 22:43	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			11/25/20 18:16	1
<b>cis-1,2-Dichloroethene</b>	<b>1.1</b>		1.0	0.16	ug/L			11/25/20 18:16	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/25/20 18:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/25/20 18:16	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/25/20 18:16	1
<b>Vinyl chloride</b>	<b>0.92</b>	<b>J</b>	1.0	0.20	ug/L			11/25/20 18:16	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)	121		75 - 130					11/25/20 18:16	1
4-Bromofluorobenzene (Surr)	111		47 - 134					11/25/20 18:16	1
Toluene-d8 (Surr)	102		69 - 122					11/25/20 18:16	1
Dibromofluoromethane (Surr)	91		78 - 129					11/25/20 18:16	1

# Client Sample Results

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

Job ID: 240-140387-1

**Client Sample ID: MW-43\_111420**

**Lab Sample ID: 240-140387-4**

Date Collected: 11/14/20 12:02

Matrix: Water

Date Received: 11/17/20 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.2		2.0	0.86	ug/L			11/23/20 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 133		11/23/20 23:09	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			11/27/20 15:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/27/20 15:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/27/20 15:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/27/20 15:03	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/27/20 15:03	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/27/20 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 130		11/27/20 15:03	1
4-Bromofluorobenzene (Surr)	91		47 - 134		11/27/20 15:03	1
Toluene-d8 (Surr)	92		69 - 122		11/27/20 15:03	1
Dibromofluoromethane (Surr)	116		78 - 129		11/27/20 15:03	1

# Client Sample Results

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

Job ID: 240-140387-1

**Client Sample ID: MW-52\_111420**

**Lab Sample ID: 240-140387-5**

Date Collected: 11/14/20 12:57

Matrix: Water

Date Received: 11/17/20 09:10

**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			11/23/20 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 133		11/23/20 23:34	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			11/27/20 15:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/27/20 15:25	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/27/20 15:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/27/20 15:25	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/27/20 15:25	1
<b>Vinyl chloride</b>	<b>3.5</b>		1.0	0.20	ug/L			11/27/20 15:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 130		11/27/20 15:25	1
4-Bromofluorobenzene (Surr)	88		47 - 134		11/27/20 15:25	1
Toluene-d8 (Surr)	89		69 - 122		11/27/20 15:25	1
Dibromofluoromethane (Surr)	120		78 - 129		11/27/20 15:25	1

# Client Sample Results

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

Job ID: 240-140387-1

**Client Sample ID: MW-120\_111420**

**Lab Sample ID: 240-140387-6**

Date Collected: 11/14/20 14:19

Matrix: Water

Date Received: 11/17/20 09:10

**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			11/23/20 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 133		11/23/20 23:59	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			11/25/20 19:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/25/20 19:30	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/25/20 19:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/25/20 19:30	1
<b>Trichloroethene</b>	<b>4.2</b>		1.0	0.10	ug/L			11/25/20 19:30	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/25/20 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		75 - 130		11/25/20 19:30	1
4-Bromofluorobenzene (Surr)	97		47 - 134		11/25/20 19:30	1
Toluene-d8 (Surr)	102		69 - 122		11/25/20 19:30	1
Dibromofluoromethane (Surr)	97		78 - 129		11/25/20 19:30	1

# Surrogate Summary

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

Job ID: 240-140387-1

## 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)
240-140323-A-4 MS	Matrix Spike	110	98	94	124
240-140323-A-4 MSD	Matrix Spike Duplicate	107	94	91	125
240-140387-1	TRIP BLANK	120	97	104	93
240-140387-2	MW-15-61D_111420	121	84	88	96
240-140387-3	MW-213S_111420	121	111	102	91
240-140387-4	MW-43_111420	110	91	92	116
240-140387-5	MW-52_111420	111	88	89	120
240-140387-6	MW-120_111420	124	97	102	97
240-140389-D-2 MS	Matrix Spike	107	117	93	84
240-140389-G-2 MSD	Matrix Spike Duplicate	107	105	107	84
LCS 240-462807/5	Lab Control Sample	107	107	105	86
LCS 240-462980/36	Lab Control Sample	109	96	94	126
MB 240-462807/8	Method Blank	120	99	102	92
MB 240-462980/9	Method Blank	109	91	90	119

**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)
240-140259-I-6 MS	Matrix Spike	88
240-140259-I-6 MSD	Matrix Spike Duplicate	90
240-140387-2	MW-15-61D_111420	84
240-140387-3	MW-213S_111420	89
240-140387-4	MW-43_111420	88
240-140387-5	MW-52_111420	86
240-140387-6	MW-120_111420	89
240-140389-A-2 MS	Matrix Spike	88
240-140389-A-2 MSD	Matrix Spike Duplicate	87
LCS 240-462286/4	Lab Control Sample	84
LCS 240-462410/4	Lab Control Sample	88
MB 240-462286/5	Method Blank	85
MB 240-462410/5	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: 240-140387-1

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

**Lab Sample ID: MB 240-462807/8**  
**Matrix: Water**  
**Analysis Batch: 462807**

**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			11/25/20 12:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/25/20 12:30	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/25/20 12:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/25/20 12:30	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/25/20 12:30	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/25/20 12:30	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	120		75 - 130		11/25/20 12:30	1
4-Bromofluorobenzene (Surr)	99		47 - 134		11/25/20 12:30	1
Toluene-d8 (Surr)	102		69 - 122		11/25/20 12:30	1
Dibromofluoromethane (Surr)	92		78 - 129		11/25/20 12:30	1

**Lab Sample ID: LCS 240-462807/5**  
**Matrix: Water**  
**Analysis Batch: 462807**

**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	20.5		ug/L		102	73 - 129
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	75 - 124
Tetrachloroethene	20.0	18.9		ug/L		94	70 - 125
trans-1,2-Dichloroethene	20.0	20.7		ug/L		103	74 - 130
Trichloroethene	20.0	17.6		ug/L		88	71 - 121
Vinyl chloride	20.0	22.9		ug/L		114	61 - 134

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		75 - 130
4-Bromofluorobenzene (Surr)	107		47 - 134
Toluene-d8 (Surr)	105		69 - 122
Dibromofluoromethane (Surr)	86		78 - 129

**Lab Sample ID: 240-140389-D-2 MS**  
**Matrix: Water**  
**Analysis Batch: 462807**

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

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	1.0	U	20.0	19.4		ug/L		97	64 - 132
cis-1,2-Dichloroethene	1.0	U	20.0	18.9		ug/L		94	68 - 121
Tetrachloroethene	1.0	U	20.0	15.7		ug/L		78	52 - 129
trans-1,2-Dichloroethene	1.0	U	20.0	18.8		ug/L		94	69 - 126
Trichloroethene	1.0	U	20.0	15.9		ug/L		79	56 - 124
Vinyl chloride	0.86	J	20.0	21.1		ug/L		101	49 - 136

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		75 - 130
4-Bromofluorobenzene (Surr)	117		47 - 134
Toluene-d8 (Surr)	93		69 - 122

Eurofins TestAmerica, Canton

# QC Sample Results

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

Job ID: 240-140387-1

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

**Lab Sample ID: 240-140389-D-2 MS**  
**Matrix: Water**  
**Analysis Batch: 462807**

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	84		78 - 129

**Lab Sample ID: 240-140389-G-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 462807**

**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	20.2		ug/L		101	64 - 132	4	35
cis-1,2-Dichloroethene	1.0	U	20.0	19.9		ug/L		99	68 - 121	5	35
Tetrachloroethene	1.0	U	20.0	17.5		ug/L		87	52 - 129	11	35
trans-1,2-Dichloroethene	1.0	U	20.0	19.8		ug/L		99	69 - 126	5	35
Trichloroethene	1.0	U	20.0	16.4		ug/L		82	56 - 124	3	35
Vinyl chloride	0.86	J	20.0	23.2		ug/L		112	49 - 136	10	35

  

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		75 - 130
4-Bromofluorobenzene (Surr)	105		47 - 134
Toluene-d8 (Surr)	107		69 - 122
Dibromofluoromethane (Surr)	84		78 - 129

**Lab Sample ID: MB 240-462980/9**  
**Matrix: Water**  
**Analysis Batch: 462980**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/27/20 11:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/27/20 11:18	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/27/20 11:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/27/20 11:18	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/27/20 11:18	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/27/20 11:18	1

  

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 130		11/27/20 11:18	1
4-Bromofluorobenzene (Surr)	91		47 - 134		11/27/20 11:18	1
Toluene-d8 (Surr)	90		69 - 122		11/27/20 11:18	1
Dibromofluoromethane (Surr)	119		78 - 129		11/27/20 11:18	1

**Lab Sample ID: LCS 240-462980/36**  
**Matrix: Water**  
**Analysis Batch: 462980**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	21.3		ug/L		106	73 - 129
cis-1,2-Dichloroethene	20.0	22.5		ug/L		112	75 - 124
Tetrachloroethene	20.0	20.6		ug/L		103	70 - 125
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	74 - 130
Trichloroethene	20.0	24.1		ug/L		121	71 - 121

Eurofins TestAmerica, Canton



# QC Sample Results

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

Job ID: 240-140387-1

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

**Lab Sample ID: LCS 240-462980/36**  
**Matrix: Water**  
**Analysis Batch: 462980**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	20.0	21.0		ug/L		105	61 - 134
<b>Surrogate</b>							
	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	109		75 - 130				
4-Bromofluorobenzene (Surr)	96		47 - 134				
Toluene-d8 (Surr)	94		69 - 122				
Dibromofluoromethane (Surr)	126		78 - 129				

**Lab Sample ID: 240-140323-A-4 MS**  
**Matrix: Water**  
**Analysis Batch: 462980**

**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	5.0	U	100	109		ug/L		109	64 - 132
cis-1,2-Dichloroethene	27	F1	100	140		ug/L		113	68 - 121
Tetrachloroethene	5.0	U	100	105		ug/L		105	52 - 129
trans-1,2-Dichloroethene	33		100	134		ug/L		101	69 - 126
Trichloroethene	170	F1	100	301	E F1	ug/L		129	56 - 124
Vinyl chloride	5.0	U	100	114		ug/L		114	49 - 136
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	110		75 - 130						
4-Bromofluorobenzene (Surr)	98		47 - 134						
Toluene-d8 (Surr)	94		69 - 122						
Dibromofluoromethane (Surr)	124		78 - 129						

**Lab Sample ID: 240-140323-A-4 MSD**  
**Matrix: Water**  
**Analysis Batch: 462980**

**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	5.0	U	100	113		ug/L		113	64 - 132	3	35
cis-1,2-Dichloroethene	27	F1	100	149	F1	ug/L		122	68 - 121	6	35
Tetrachloroethene	5.0	U	100	112		ug/L		112	52 - 129	7	35
trans-1,2-Dichloroethene	33		100	144		ug/L		111	69 - 126	7	35
Trichloroethene	170	F1	100	306	E F1	ug/L		134	56 - 124	2	35
Vinyl chloride	5.0	U	100	106		ug/L		106	49 - 136	8	35
<b>Surrogate</b>											
	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	107		75 - 130								
4-Bromofluorobenzene (Surr)	94		47 - 134								
Toluene-d8 (Surr)	91		69 - 122								
Dibromofluoromethane (Surr)	125		78 - 129								

# QC Sample Results

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

Job ID: 240-140387-1

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

**Lab Sample ID: MB 240-462286/5**  
**Matrix: Water**  
**Analysis Batch: 462286**

**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			11/23/20 02:33	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 133					11/23/20 02:33	1

**Lab Sample ID: LCS 240-462286/4**  
**Matrix: Water**  
**Analysis Batch: 462286**

**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	9.91		ug/L		99	80 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	84		70 - 133				

**Lab Sample ID: 240-140389-A-2 MS**  
**Matrix: Water**  
**Analysis Batch: 462286**

**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
1,4-Dioxane	1.5	J	10.0	12.2		ug/L		107	46 - 170
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	88		70 - 133						

**Lab Sample ID: 240-140389-A-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 462286**

**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	Limit
1,4-Dioxane	1.5	J	10.0	12.3		ug/L		108	46 - 170	1	26
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	87		70 - 133								

**Lab Sample ID: MB 240-462410/5**  
**Matrix: Water**  
**Analysis Batch: 462410**

**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			11/23/20 14:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 133					11/23/20 14:44	1

Eurofins TestAmerica, Canton

# QC Sample Results

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

Job ID: 240-140387-1

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

**Lab Sample ID: LCS 240-462410/4**  
**Matrix: Water**  
**Analysis Batch: 462410**

**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	10.5		ug/L		105	80 - 135
<b>Surrogate</b>							
	%Recovery	LCS Qualifier	LCS Limits				
1,2-Dichloroethane-d4 (Surr)	88		70 - 133				

**Lab Sample ID: 240-140259-I-6 MS**  
**Matrix: Water**  
**Analysis Batch: 462410**

**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
1,4-Dioxane	2.0	U	10.0	9.91		ug/L		99	46 - 170
<b>Surrogate</b>									
	%Recovery	MS Qualifier	MS Limits						
1,2-Dichloroethane-d4 (Surr)	88		70 - 133						

**Lab Sample ID: 240-140259-I-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 462410**

**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
1,4-Dioxane	2.0	U	10.0	10.3		ug/L		103	46 - 170	4	26
<b>Surrogate</b>											
	%Recovery	MSD Qualifier	MSD Limits								
1,2-Dichloroethane-d4 (Surr)	90		70 - 133								

# QC Association Summary

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

Job ID: 240-140387-1

## GC/MS VOA

### Analysis Batch: 462286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140387-2	MW-15-61D_111420	Total/NA	Water	8260B SIM	
MB 240-462286/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-462286/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-140389-A-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-140389-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

### Analysis Batch: 462410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140387-3	MW-213S_111420	Total/NA	Water	8260B SIM	
240-140387-4	MW-43_111420	Total/NA	Water	8260B SIM	
240-140387-5	MW-52_111420	Total/NA	Water	8260B SIM	
240-140387-6	MW-120_111420	Total/NA	Water	8260B SIM	
MB 240-462410/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-462410/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-140259-I-6 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-140259-I-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

### Analysis Batch: 462807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140387-1	TRIP BLANK	Total/NA	Water	8260B	
240-140387-2	MW-15-61D_111420	Total/NA	Water	8260B	
240-140387-3	MW-213S_111420	Total/NA	Water	8260B	
240-140387-6	MW-120_111420	Total/NA	Water	8260B	
MB 240-462807/8	Method Blank	Total/NA	Water	8260B	
LCS 240-462807/5	Lab Control Sample	Total/NA	Water	8260B	
240-140389-D-2 MS	Matrix Spike	Total/NA	Water	8260B	
240-140389-G-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

### Analysis Batch: 462980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140387-4	MW-43_111420	Total/NA	Water	8260B	
240-140387-5	MW-52_111420	Total/NA	Water	8260B	
MB 240-462980/9	Method Blank	Total/NA	Water	8260B	
LCS 240-462980/36	Lab Control Sample	Total/NA	Water	8260B	
240-140323-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
240-140323-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

# Lab Chronicle

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

Job ID: 240-140387-1

## Client Sample ID: TRIP BLANK

Date Collected: 11/14/20 00:00

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462807	11/25/20 17:27	HMB	TAL CAN

## Client Sample ID: MW-15-61D\_111420

Date Collected: 11/14/20 09:16

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462807	11/25/20 17:52	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462286	11/23/20 12:15	TJL2	TAL CAN

## Client Sample ID: MW-213S\_111420

Date Collected: 11/14/20 10:40

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462807	11/25/20 18:16	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462410	11/23/20 22:43	SAM	TAL CAN

## Client Sample ID: MW-43\_111420

Date Collected: 11/14/20 12:02

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462980	11/27/20 15:03	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462410	11/23/20 23:09	SAM	TAL CAN

## Client Sample ID: MW-52\_111420

Date Collected: 11/14/20 12:57

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462980	11/27/20 15:25	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462410	11/23/20 23:34	SAM	TAL CAN

## Client Sample ID: MW-120\_111420

Date Collected: 11/14/20 14:19

Date Received: 11/17/20 09:10

Lab Sample ID: 240-140387-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462807	11/25/20 19:30	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	462410	11/23/20 23:59	SAM	TAL CAN

### Laboratory References:

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

Eurofins TestAmerica, Canton

# Accreditation/Certification Summary

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

Job ID: 240-140387-1

## 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

**Chain of Custody Record**

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

<b>Client Contact</b> Company Name: Arcadis Address: 28550 Cabot Drive, Suite 500 City/State/Zip: Novi, MI, 48377 Phone: 248-994-2240		<b>Regulatory program:</b> <input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other		<b>TestAmerica Laboratories, Inc.</b> COC No: _____ Lab Contact: Mike DelMontico Telephone: 330-497-9396	
<b>Client Project Manager:</b> Kris Hinskey Telephone: 248-994-2240 Email: kris@hinskey.com		<b>Site Contact:</b> Julia McClafferty Telephone: 734-644-5131		<b>Analyses</b> Walk-in client Lab sampling Job/SDG No: _____	
<b>Sampler Name:</b> Julia McClafferty <b>Method of Shipment/Carrier:</b> <b>Shipping/Tracking No:</b>		<b>Analysis Turnaround Time</b> IAT if different from below <input type="checkbox"/> 3 weeks <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day <b>10 day</b>		<b>Containers &amp; Preservatives</b> Znac/NaOH NaOH HCl HNO3 H2SO4 Other: _____	
<b>Sample Identification</b> TRIP BLANK MW-15-61D-111420 MW-2135-111420 MW-43-111420 MW-52-111420 MW-120-111420		<b>Matrix</b> Aqueous Sediment Solid Other: _____		<b>Filtered Sample (Y/N)</b> Composite C/Grab G 1,1-DCE 8260B cis-1,2-DCE 8260B Trans-1,2-DCE 8260B PCE 8260B TCE 8260B Vinyl Chloride 8260B 1,4-Dioxane 8260B SIM	
<b>Sample Date</b> 11/14/20 1040 1202 1257 1419		<b>Sample Time</b> 0916 1040 1202 1257 1419		<b>Sample Specific Notes / Special Instructions:</b> 1 Trip Blank 3VOAs for 8260B 3VOAs for 8260B SIM	
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		<b>Special Instructions/QC Requirements &amp; Comments:</b> Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728 Level IV Reporting requested.		240-140387 Chain of Custody 1 month	
<b>Relinquished by:</b> Julia McClafferty <b>Relinquished by:</b> Julia McClafferty <b>Relinquished by:</b> Matthew C. Adams		<b>Received by:</b> Novi Cold Storage <b>Received by:</b> [Signature] <b>Received in Laboratory by:</b>		<b>Date/Time:</b> 11/14/20 1550 <b>Date/Time:</b> 11/16/20 1100 <b>Date/Time:</b> 11/16/20 1700	
<b>Company:</b> Arcadis <b>Company:</b> Arcadis <b>Company:</b> PTA		<b>Company:</b> Arcadis <b>Company:</b> ETA <b>Company:</b>		<b>Date/Time:</b> 11/14/20 1550 <b>Date/Time:</b> 11-17-20 910 <b>Date/Time:</b>	



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**Eurofins TestAmerica Canton Sample Receipt Form/Narrative** Login # : 140387  
**Canton Facility**

Client Arcadis Site Name \_\_\_\_\_ Cooler unpacked by: Yanyu Rong  
Cooler Received on 11-17-20 Opened on 11-17-20  
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 # TA  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. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °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  
-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  
15. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA  
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_ Yes No  
17. Was a LL Hg or Me Hg trip blank present? Yes No

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

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

**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: \_\_\_\_\_



**Euofins TestAmerica Canton Sample Receipt Multiple Cooler Form**

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
TA	Client	Box	Other	IR-11	0.9	1.8	Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11	1.5	2.4	Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		
TA	Client	Box	Other	IR-11			Wet Ice	Blue Ice	Dry Ice
	Water			IR-12			None		

See Temperature Excursion Form