

## ANALYTICAL REPORT

Eurofins TestAmerica, Canton  
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Laboratory Job ID: 240-135514-1  
Client Project/Site: Ford LTP On-Site

For:  
ARCADIS U.S., Inc.  
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Novi, Michigan 48377

Attn: Kristoffer Hinskey



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Authorized for release by:  
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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: 240-135514-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
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: 240-135514-1

**Job ID: 240-135514-1**

**Laboratory: Eurofins TestAmerica, Canton**

**Narrative**

## CASE NARRATIVE

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

**Project: Ford LTP On-Site**

**Report Number: 240-135514-1**

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 8/25/2020 9:30 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 1.1° C and 1.6° C.

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

Samples TRIP BLANK (240-135514-1), MW-15-60D\_082120 (240-135514-2) and MW-15-59D\_082120 (240-135514-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/03/2020.

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-15-60D\_082120 (240-135514-2) and MW-15-59D\_082120 (240-135514-3) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 08/31/2020.

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: 240-135514-1

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



# Sample Summary

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

Job ID: 240-135514-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-135514-1	TRIP BLANK	Water	08/21/20 00:00	08/25/20 09:30	
240-135514-2	MW-15-60D_082120	Water	08/21/20 10:50	08/25/20 09:30	
240-135514-3	MW-15-59D_082120	Water	08/21/20 13:35	08/25/20 09:30	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Detection Summary

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

Job ID: 240-135514-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-135514-1**

No Detections.

**Client Sample ID: MW-15-60D\_082120**

**Lab Sample ID: 240-135514-2**

No Detections.

**Client Sample ID: MW-15-59D\_082120**

**Lab Sample ID: 240-135514-3**

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

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: 240-135514-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-135514-1**

**Date Collected: 08/21/20 00:00**

**Matrix: Water**

**Date Received: 08/25/20 09:30**

**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	0.46	ug/L			09/03/20 16:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			09/03/20 16:40	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			09/03/20 16:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			09/03/20 16:40	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			09/03/20 16:40	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			09/03/20 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 130		09/03/20 16:40	1
4-Bromofluorobenzene (Surr)	92		47 - 134		09/03/20 16:40	1
Toluene-d8 (Surr)	90		69 - 122		09/03/20 16:40	1
Dibromofluoromethane (Surr)	85		78 - 129		09/03/20 16:40	1



# Client Sample Results

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

Job ID: 240-135514-1

**Client Sample ID: MW-15-60D\_082120**

**Lab Sample ID: 240-135514-2**

Date Collected: 08/21/20 10:50

Matrix: Water

Date Received: 08/25/20 09:30

**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			08/31/20 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 133					08/31/20 16:14	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	0.46	ug/L			09/03/20 18:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			09/03/20 18:20	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			09/03/20 18:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			09/03/20 18:20	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			09/03/20 18:20	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			09/03/20 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 130					09/03/20 18:20	1
4-Bromofluorobenzene (Surr)	101		47 - 134					09/03/20 18:20	1
Toluene-d8 (Surr)	91		69 - 122					09/03/20 18:20	1
Dibromofluoromethane (Surr)	84		78 - 129					09/03/20 18:20	1

# Client Sample Results

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

Job ID: 240-135514-1

**Client Sample ID: MW-15-59D\_082120**

**Lab Sample ID: 240-135514-3**

Date Collected: 08/21/20 13:35

Matrix: Water

Date Received: 08/25/20 09:30

**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			08/31/20 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 133		08/31/20 16:39	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	0.46	ug/L			09/03/20 18:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			09/03/20 18:44	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			09/03/20 18:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			09/03/20 18:44	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			09/03/20 18:44	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			09/03/20 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 130		09/03/20 18:44	1
4-Bromofluorobenzene (Surr)	95		47 - 134		09/03/20 18:44	1
Toluene-d8 (Surr)	91		69 - 122		09/03/20 18:44	1
Dibromofluoromethane (Surr)	82		78 - 129		09/03/20 18:44	1

# Surrogate Summary

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

Job ID: 240-135514-1

## 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)
240-135514-1	TRIP BLANK	92	92	90	85
240-135514-2	MW-15-60D_082120	94	101	91	84
240-135514-3	MW-15-59D_082120	91	95	91	82
240-135515-G-2 MS	Matrix Spike	90	94	87	87
240-135515-H-2 MSD	Matrix Spike Duplicate	92	100	90	85
LCS 240-449880/4	Lab Control Sample	91	100	90	85
MB 240-449880/7	Method Blank	88	97	92	82

### 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)
240-135514-2	MW-15-60D_082120	88
240-135514-3	MW-15-59D_082120	90
240-135520-C-2 MS	Matrix Spike	90
240-135520-C-2 MSD	Matrix Spike Duplicate	88
LCS 240-449401/4	Lab Control Sample	92
MB 240-449401/5	Method Blank	86

### Surrogate Legend

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

# QC Sample Results

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

Job ID: 240-135514-1

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

**Lab Sample ID: MB 240-449880/7**  
**Matrix: Water**  
**Analysis Batch: 449880**

**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	0.46	ug/L			09/03/20 13:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			09/03/20 13:47	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			09/03/20 13:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			09/03/20 13:47	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			09/03/20 13:47	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			09/03/20 13:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		75 - 130		09/03/20 13:47	1
4-Bromofluorobenzene (Surr)	97		47 - 134		09/03/20 13:47	1
Toluene-d8 (Surr)	92		69 - 122		09/03/20 13:47	1
Dibromofluoromethane (Surr)	82		78 - 129		09/03/20 13:47	1

**Lab Sample ID: LCS 240-449880/4**  
**Matrix: Water**  
**Analysis Batch: 449880**

**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	10.0	10.6		ug/L		106	73 - 129
cis-1,2-Dichloroethene	10.0	10.8		ug/L		108	75 - 124
Tetrachloroethene	10.0	10.6		ug/L		106	70 - 125
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	74 - 130
Trichloroethene	10.0	10.7		ug/L		107	71 - 121
Vinyl chloride	10.0	11.4		ug/L		114	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		75 - 130
4-Bromofluorobenzene (Surr)	100		47 - 134
Toluene-d8 (Surr)	90		69 - 122
Dibromofluoromethane (Surr)	85		78 - 129

**Lab Sample ID: 240-135515-G-2 MS**  
**Matrix: Water**  
**Analysis Batch: 449880**

**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	10.0	9.93		ug/L		99	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.76		ug/L		98	68 - 121
Tetrachloroethene	1.0	U	10.0	9.00		ug/L		90	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	8.98		ug/L		90	69 - 126
Trichloroethene	1.0	U	10.0	9.40		ug/L		94	56 - 124
Vinyl chloride	1.0	U	10.0	11.4		ug/L		114	49 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		75 - 130
4-Bromofluorobenzene (Surr)	94		47 - 134
Toluene-d8 (Surr)	87		69 - 122

# QC Sample Results

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

Job ID: 240-135514-1

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

**Lab Sample ID: 240-135515-G-2 MS**  
**Matrix: Water**  
**Analysis Batch: 449880**

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	87		78 - 129

**Lab Sample ID: 240-135515-H-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 449880**

**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	10.0	9.55		ug/L		96	64 - 132	4	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.78		ug/L		98	68 - 121	0	35
Tetrachloroethene	1.0	U	10.0	8.91		ug/L		89	52 - 129	1	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.35		ug/L		94	69 - 126	4	35
Trichloroethene	1.0	U	10.0	9.49		ug/L		95	56 - 124	1	35
Vinyl chloride	1.0	U	10.0	11.5		ug/L		115	49 - 136	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		75 - 130
4-Bromofluorobenzene (Surr)	100		47 - 134
Toluene-d8 (Surr)	90		69 - 122
Dibromofluoromethane (Surr)	85		78 - 129

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

**Lab Sample ID: MB 240-449401/5**  
**Matrix: Water**  
**Analysis Batch: 449401**

**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			08/31/20 12:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 133		08/31/20 12:55	1

**Lab Sample ID: LCS 240-449401/4**  
**Matrix: Water**  
**Analysis Batch: 449401**

**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	11.4		ug/L		114	80 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 133

**Lab Sample ID: 240-135520-C-2 MS**  
**Matrix: Water**  
**Analysis Batch: 449401**

**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	4.5		10.0	15.2		ug/L		107	46 - 170

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# QC Sample Results

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

Job ID: 240-135514-1

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	90		70 - 133

**Lab Sample ID: 240-135520-C-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 449401**

**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>
1,4-Dioxane	4.5		10.0	15.3		ug/L		107	46 - 170	1	26

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	88		70 - 133



# QC Association Summary

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

Job ID: 240-135514-1

## GC/MS VOA

### Analysis Batch: 449401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-135514-2	MW-15-60D_082120	Total/NA	Water	8260B SIM	
240-135514-3	MW-15-59D_082120	Total/NA	Water	8260B SIM	
MB 240-449401/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-449401/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-135520-C-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-135520-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

### Analysis Batch: 449880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-135514-1	TRIP BLANK	Total/NA	Water	8260B	
240-135514-2	MW-15-60D_082120	Total/NA	Water	8260B	
240-135514-3	MW-15-59D_082120	Total/NA	Water	8260B	
MB 240-449880/7	Method Blank	Total/NA	Water	8260B	
LCS 240-449880/4	Lab Control Sample	Total/NA	Water	8260B	
240-135515-G-2 MS	Matrix Spike	Total/NA	Water	8260B	
240-135515-H-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

# Lab Chronicle

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

Job ID: 240-135514-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-135514-1**

**Date Collected: 08/21/20 00:00**

**Matrix: Water**

**Date Received: 08/25/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449880	09/03/20 16:40	LRW	TAL CAN

**Client Sample ID: MW-15-60D\_082120**

**Lab Sample ID: 240-135514-2**

**Date Collected: 08/21/20 10:50**

**Matrix: Water**

**Date Received: 08/25/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449880	09/03/20 18:20	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	449401	08/31/20 16:14	SAM	TAL CAN

**Client Sample ID: MW-15-59D\_082120**

**Lab Sample ID: 240-135514-3**

**Date Collected: 08/21/20 13:35**

**Matrix: Water**

**Date Received: 08/25/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	449880	09/03/20 18:44	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	449401	08/31/20 16:39	SAM	TAL CAN

**Laboratory References:**

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



# Accreditation/Certification Summary

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

Job ID: 240-135514-1

## 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	07-31-20 *
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	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

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

# Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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>Client Project Manager:</b> Kris Hinskey Telephone: 248-994-2240 Email: kris@hinskey.com		<b>Lab Contact:</b> Mite DelMonico Telephone: 330-497-9396	
<b>Sample Name:</b> Patrick Cabodre <b>Method of Shipment/Carrier:</b> Shipping/Tracking No:		<b>Analysis Turnaround Time</b> TAT (if different from below): 10 day <input type="checkbox"/> 3 weeks <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day <input type="checkbox"/>	
<b>Sample Identification</b> TRIP BLANK MW-15-60D-082120 MW-15-59D-082120		<b>Analyses</b> 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>Matrix</b> Aqueous <input type="checkbox"/> Solid <input type="checkbox"/> Other: <input type="checkbox"/> Air <input type="checkbox"/> Sediment <input type="checkbox"/> Other: <input type="checkbox"/> Sample Time: 10:50 13:35		<b>Filtered Sample (Y/N)</b> Y Y Y	
<b>Containers &amp; Preservatives</b> H2SO4 <input type="checkbox"/> HNO3 <input type="checkbox"/> HCl <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> NaOH <input type="checkbox"/> Other: <input type="checkbox"/>		<b>Simple Specific Notes / Special Instructions:</b> TRIP BLANK 3 Vials for 8260B 3 Vials for 8260BSIM	
<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>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
<b>Special Instructions/QC Requirements &amp; Comments:</b> Submit all results through Cadena at tomalia@cadenaco.com, Cadena #E203728 Level IV Reporting requested.			
Relinquished by: Patrick Cabodre Date/Time: 8-21-20 / 15:30 Company: ARCADIS		Received by: NOV. Cold Storage Date/Time: 8/24/20 1410 Company: ARCADIS	
Relinquished by: RACHEL BLEAK Paul Jordan Date/Time: 8/24/20 1410 Company: ARCADIS		Received in Laboratory by: [Signature] Date/Time: 8/24/20 1410 Company: ARCADIS	



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**Eurofins TestAmerica Canton Sample Receipt Form/Narrative**  
**Canton Facility**

Login # : 135514

Client Arcadis Site Name \_\_\_\_\_

Cooler unpacked by:  
Stanny Rayer

Cooler Received on 8-25-20 Opened on 8-25-20

FedEx: 1"  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-10 (CF +0.7°C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C  
 IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 0.2 °C Corrected Cooler Temp. 1.1 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1  
 -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 be reconciled with the COC? Yes  No
9. Were correct bottle(s) used for the test(s) indicated? Yes  No
10. Sufficient quantity received to perform indicated analyses? Yes  No
11. Are these work share samples? Yes  No
- If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes  No  NA  pH Strip Lot# HC911298
13. Were VOAs on the COC? Yes  No
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes  No  NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_ Yes  No
16. 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 \_\_\_\_\_

**17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**18. 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)

**19. 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: \_\_\_\_\_

