

## ANALYTICAL REPORT

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

Laboratory Job ID: 240-111903-1  
Client Project/Site: Ford LTP Livonia MI - E203631

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

Attn: Kristoffer Hinskey



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Authorized for release by:  
5/16/2019 1:56:07 PM

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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 Livonia MI - E203631

Job ID: 240-111903-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

**Job ID: 240-111903-1**

**Laboratory: Eurofins TestAmerica, Canton**

**Narrative**

## CASE NARRATIVE

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

**Project: Ford LTP Livonia MI - E203631**

**Report Number: 240-111903-1**

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 5/2/2019 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6° C.

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

Samples MW-54S\_042919 (240-111903-1) and TRIP BLANK (240-111903-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/09/2019.

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

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

Sample MW-54S\_042919 (240-111903-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 05/07/2019.

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 Livonia MI - E203631

Job ID: 240-111903-1

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 Livonia MI - E203631

Job ID: 240-111903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-111903-1	MW-54S_042919	Water	04/29/19 11:40	05/02/19 08:30
240-111903-2	TRIP BLANK	Water	04/29/19 00:00	05/02/19 08:30

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- 9
- 10
- 11
- 12
- 13
- 14

# Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

**Client Sample ID: MW-54S\_042919**

**Lab Sample ID: 240-111903-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.26	J	1.0	0.16	ug/L	1		8260B	Total/NA

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-111903-2**

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 Livonia MI - E203631

Job ID: 240-111903-1

**Client Sample ID: MW-54S\_042919**

**Lab Sample ID: 240-111903-1**

Date Collected: 04/29/19 11:40

Matrix: Water

Date Received: 05/02/19 08:30

**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	-		05/07/19 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 125					05/07/19 22:18	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	-		05/09/19 14:06	1
<b>cis-1,2-Dichloroethene</b>	<b>0.26</b>	<b>J</b>	1.0	0.16	ug/L	-		05/09/19 14:06	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L	-		05/09/19 14:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L	-		05/09/19 14:06	1
Trichloroethene	1.0	U	1.0	0.10	ug/L	-		05/09/19 14:06	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L	-		05/09/19 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 121					05/09/19 14:06	1
4-Bromofluorobenzene (Surr)	83		59 - 120					05/09/19 14:06	1
Toluene-d8 (Surr)	106		70 - 123					05/09/19 14:06	1
Dibromofluoromethane (Surr)	120		75 - 128					05/09/19 14:06	1



# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-111903-2**

**Date Collected: 04/29/19 00:00**

**Matrix: Water**

**Date Received: 05/02/19 08:30**

**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	0.19	ug/L			05/09/19 14:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/09/19 14:28	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/09/19 14:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 14:28	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/09/19 14:28	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/09/19 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 121		05/09/19 14:28	1
4-Bromofluorobenzene (Surr)	78		59 - 120		05/09/19 14:28	1
Toluene-d8 (Surr)	102		70 - 123		05/09/19 14:28	1
Dibromofluoromethane (Surr)	119		75 - 128		05/09/19 14:28	1

# Surrogate Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (70-121)	BFB (59-120)	TOL (70-123)	DBFM (75-128)
240-111829-B-8 MS	Matrix Spike	98	101	110	110
240-111829-B-8 MSD	Matrix Spike Duplicate	99	102	113	110
240-111903-1	MW-54S_042919	116	83	106	120
240-111903-2	TRIP BLANK	115	78	102	119
LCS 240-380381/4	Lab Control Sample	101	101	111	104
MB 240-380381/6	Method Blank	114	83	98	126

#### 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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (63-125)
240-111903-1	MW-54S_042919	84
500-162259-A-14 MS	Matrix Spike	85
500-162259-A-14 MSD	Matrix Spike Duplicate	83
LCS 240-379995/4	Lab Control Sample	90
MB 240-379995/5	Method Blank	90

#### Surrogate Legend

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

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

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

**Lab Sample ID: MB 240-380381/6**  
**Matrix: Water**  
**Analysis Batch: 380381**

**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			05/09/19 11:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/09/19 11:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/09/19 11:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/09/19 11:04	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/09/19 11:04	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/09/19 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 121		05/09/19 11:04	1
4-Bromofluorobenzene (Surr)	83		59 - 120		05/09/19 11:04	1
Toluene-d8 (Surr)	98		70 - 123		05/09/19 11:04	1
Dibromofluoromethane (Surr)	126		75 - 128		05/09/19 11:04	1

**Lab Sample ID: LCS 240-380381/4**  
**Matrix: Water**  
**Analysis Batch: 380381**

**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	8.80		ug/L		88	65 - 139
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	76 - 128
Tetrachloroethene	10.0	10.7		ug/L		107	74 - 130
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	78 - 133
Trichloroethene	10.0	9.38		ug/L		94	76 - 125
Vinyl chloride	10.0	7.74		ug/L		77	58 - 143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 121
4-Bromofluorobenzene (Surr)	101		59 - 120
Toluene-d8 (Surr)	111		70 - 123
Dibromofluoromethane (Surr)	104		75 - 128

**Lab Sample ID: 240-111829-B-8 MS**  
**Matrix: Water**  
**Analysis Batch: 380381**

**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	100	U	1000	743		ug/L		74	53 - 140
cis-1,2-Dichloroethene	3300	F1	1000	3960	F1	ug/L		63	64 - 130
Tetrachloroethene	100	U	1000	871		ug/L		87	51 - 136
trans-1,2-Dichloroethene	110		1000	1100		ug/L		99	68 - 133
Trichloroethene	100	U	1000	795		ug/L		80	55 - 131
Vinyl chloride	36	J	1000	854		ug/L		82	43 - 154

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 121
4-Bromofluorobenzene (Surr)	101		59 - 120
Toluene-d8 (Surr)	110		70 - 123

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

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

**Lab Sample ID: 240-111829-B-8 MS**  
**Matrix: Water**  
**Analysis Batch: 380381**

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

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	110		75 - 128

**Lab Sample ID: 240-111829-B-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 380381**

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

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
1,1-Dichloroethene	100	U	1000	852		ug/L		85	53 - 140	14	35	
cis-1,2-Dichloroethene	3300	F1	1000	4190	E	ug/L		86	64 - 130	6	21	
Tetrachloroethene	100	U	1000	980		ug/L		98	51 - 136	12	23	
trans-1,2-Dichloroethene	110		1000	1170		ug/L		106	68 - 133	6	24	
Trichloroethene	100	U	1000	869		ug/L		87	55 - 131	9	23	
Vinyl chloride	36	J	1000	983		ug/L		95	43 - 154	14	29	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		70 - 121
4-Bromofluorobenzene (Surr)	102		59 - 120
Toluene-d8 (Surr)	113		70 - 123
Dibromofluoromethane (Surr)	110		75 - 128

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

**Lab Sample ID: MB 240-379995/5**  
**Matrix: Water**  
**Analysis Batch: 379995**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/19 12:39	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		63 - 125		05/07/19 12:39	1

**Lab Sample ID: LCS 240-379995/4**  
**Matrix: Water**  
**Analysis Batch: 379995**

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

Analyte	Spike	LCS LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,4-Dioxane	10.0	12.8		ug/L		128	59 - 131

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		63 - 125

**Lab Sample ID: 500-162259-A-14 MS**  
**Matrix: Water**  
**Analysis Batch: 379995**

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

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
1,4-Dioxane	4900		300	5280	4	ug/L		131	52 - 129

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

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

<i>Surrogate</i>	<i>MS</i> <i>%Recovery</i>	<i>MS</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	85		63 - 125

Lab Sample ID: 500-162259-A-14 MSD  
 Matrix: Water  
 Analysis Batch: 379995

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

<i>Analyte</i>	<i>Sample</i> <i>Result</i>	<i>Sample</i> <i>Qualifier</i>	<i>Spike</i> <i>Added</i>	<i>MSD</i> <i>Result</i>	<i>MSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
1,4-Dioxane	4900		300	5330	4	ug/L		149	52 - 129	1	13

<i>Surrogate</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	83		63 - 125

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# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

## GC/MS VOA

### Analysis Batch: 379995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111903-1	MW-54S_042919	Total/NA	Water	8260B SIM	
MB 240-379995/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-379995/4	Lab Control Sample	Total/NA	Water	8260B SIM	
500-162259-A-14 MS	Matrix Spike	Total/NA	Water	8260B SIM	
500-162259-A-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

### Analysis Batch: 380381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-111903-1	MW-54S_042919	Total/NA	Water	8260B	
240-111903-2	TRIP BLANK	Total/NA	Water	8260B	
MB 240-380381/6	Method Blank	Total/NA	Water	8260B	
LCS 240-380381/4	Lab Control Sample	Total/NA	Water	8260B	
240-111829-B-8 MS	Matrix Spike	Total/NA	Water	8260B	
240-111829-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-111903-1

**Client Sample ID: MW-54S\_042919**

**Lab Sample ID: 240-111903-1**

**Date Collected: 04/29/19 11:40**

**Matrix: Water**

**Date Received: 05/02/19 08:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	380381	05/09/19 14:06	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	379995	05/07/19 22:18	SAM	TAL CAN

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-111903-2**

**Date Collected: 04/29/19 00:00**

**Matrix: Water**

**Date Received: 05/02/19 08:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	380381	05/09/19 14:28	LEE	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 Livonia MI - E203631

Job ID: 240-111903-1

## Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

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

Eurofins TestAmerica, Canton



TestAmerica Michigan  
 10448 Citation Drive  
 Suite 200  
 Brighton, MI 48116  
 Phone: 810.229.2763 Fax:

MICHIGAN Chain of Custody Record  
 190

303046

TestAmerica  
 THE LEADER IN ENVIRONMENTAL TESTING  
 TestAmerica Laboratories, Inc.  
 TAL-8210 (0713)

Regulatory Program:  DW  NPDES  RCRA  Other:

Company Name: <b>ARCADIS</b> Address: <b>2850 CANTON DR #500</b> City/State/Zip: <b>NOW MI 48317</b> Phone: <b>248-944-2240</b> Fax: Project Name: <b>FORD UP</b> Site: <b>AF-SIC</b> P O #: <b>M1604541.0001.0002</b>		Client Contact Project Manager: <b>IRIS HINSLEY</b> Tell/Fax: <b>269-579-5702</b> <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS <input checked="" type="checkbox"/> AT if different from Below <b>STANDARD</b> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 10-DAY <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: <b>CANTON</b> Date: <b>4/25/18</b> Lab Contact: Carrier:		COC No: <b>1</b> of <b>1</b> COCs Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes:	
Sample Identification <b>MW545-042919</b> <b>TRP BLANK</b>		Filtered Sample (Y/N) <b>NNX2</b> <b>NNX</b>		Perform MS / MSD (Y/N) <b>PRECIPITATION</b> <b>SEE BELOW</b>		Sample Specific Notes:	
Sample Date: <b>4-24-19</b> Sample Time: <b>1140</b> Sample Type (C=Comp, G=Grab): <b>G</b> Matrix: <b>GW</b> # of Cont.: <b>6</b>		Matrix: <b>W</b> # of Cont.: <b>1</b>		Sample Specific Notes:			
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							
Special Instructions/QC Requirements & Comments: <b>ANALYZE SAMPLES FOR: 1,1-DCE, 1,2-DCE, TRANS 1,2-DCE, PCE, TCE, AND VINYL CHLORIDE VIA USEPA METHOD 8260 IS AND #1,1-DICHLOROETHANE VIA USEPA METHOD 8210-SIM. SIGNIT ALL RESULTS THROUGH CANTON AT JIM.TEMPLER@ARCADIS.COM #570862</b>							
Relinquished by: <b>Shawntel Johnson</b> Relinquished by: <b>Matthew O'Neil</b> Relinquished by: <b>Ray</b>		Received by: <b>ARCADIS</b> Received by: <b>ARCADIS</b> Received by: <b>FATA</b>		Date/Time: <b>4/25/19</b> Date/Time: <b>05/01/19</b> Date/Time: <b>05/01/19 15:13</b>		Company: <b>ARCADIS</b> Company: <b>ARCADIS</b> Company: <b>FATA</b>	
Relinquished by: <b>Shawntel Johnson</b> Relinquished by: <b>Matthew O'Neil</b> Relinquished by: <b>Ray</b>		Received by: <b>ARCADIS</b> Received by: <b>ARCADIS</b> Received by: <b>FATA</b>		Date/Time: <b>4/25/19</b> Date/Time: <b>05/01/19</b> Date/Time: <b>05/01/19 15:13</b>		Company: <b>ARCADIS</b> Company: <b>ARCADIS</b> Company: <b>FATA</b>	




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

Login # : 111903

Client Arcadis Site Name \_\_\_\_\_ Cooler unpacked by: DSD  
 Cooler Received on 05/02/19 Opened on 05/02/19  
 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-8 (CF -0.2 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.6 °C  
 IR GUN #36 (CF +0.7°C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 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 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# HC984738
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # N/A 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: DSD

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

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