

## ANALYTICAL REPORT

Eurofins TestAmerica, Canton  
4101 Shuffel Street NW  
North Canton, OH 44720  
Tel: (330)497-9396

Laboratory Job ID: 240-114386-1

Client Project/Site: Ford LTP Livonia MI - E203728

**For:**

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

Attn: Kristoffer Hinskey



Authorized for release by:  
6/28/2019 10:22:56 AM

Michael DelMonico, Project Manager I  
(330)497-9396  
[michael.delmonico@testamericainc.com](mailto:michael.delmonico@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	9
Surrogate Summary . . . . .	14
QC Sample Results . . . . .	15
QC Association Summary . . . . .	19
Lab Chronicle . . . . .	20
Certification Summary . . . . .	21
Chain of Custody . . . . .	22



# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 - E203728

Job ID: 240-114386-1

**Job ID: 240-114386-1**

**Laboratory: Eurofins TestAmerica, Canton**

**Narrative**

## CASE NARRATIVE

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

**Project: Ford LTP Livonia MI - E203728**

**Report Number: 240-114386-1**

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 6/14/2019 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 1.9° C.

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

Samples MW-14\_061219 (240-114386-1), MW-20\_061219 (240-114386-2), MW-37\_061219 (240-114386-3), MW-47\_061219 (240-114386-4) and TRIP BLANK (240-114386-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/24/2019 and 06/25/2019.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for TRIP BLANK (240-114386-5). Refer to the QC report for details.

Sample MW-47\_061219 (240-114386-4)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Surrogate recovery for the following sample was outside the upper control limit: TRIP BLANK (240-114386-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

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

Samples MW-14\_061219 (240-114386-1), MW-20\_061219 (240-114386-2), MW-37\_061219 (240-114386-3) and MW-47\_061219

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

---

## Job ID: 240-114386-1 (Continued)

---

### Laboratory: Eurofins TestAmerica, Canton (Continued)

(240-114386-4) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/17/2019 and 06/18/2019.

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

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

# Method Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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 - E203728

Job ID: 240-114386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-114386-1	MW-14_061219	Water	06/12/19 10:30	06/14/19 08:15	
240-114386-2	MW-20_061219	Water	06/12/19 12:30	06/14/19 08:15	
240-114386-3	MW-37_061219	Water	06/12/19 16:30	06/14/19 08:15	
240-114386-4	MW-47_061219	Water	06/12/19 14:30	06/14/19 08:15	
240-114386-5	TRIP BLANK	Water	06/12/19 00:00	06/14/19 08:15	

- 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 Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-14\_061219**

**Lab Sample ID: 240-114386-1**

No Detections.

**Client Sample ID: MW-20\_061219**

**Lab Sample ID: 240-114386-2**

No Detections.

**Client Sample ID: MW-37\_061219**

**Lab Sample ID: 240-114386-3**

No Detections.

**Client Sample ID: MW-47\_061219**

**Lab Sample ID: 240-114386-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	25		4.0	0.64	ug/L	4			8260B	Total/NA
trans-1,2-Dichloroethene	5.3		4.0	0.76	ug/L	4			8260B	Total/NA
Vinyl chloride	120		4.0	0.80	ug/L	4			8260B	Total/NA

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-114386-5**

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 - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-14\_061219**

**Lab Sample ID: 240-114386-1**

Date Collected: 06/12/19 10:30

Matrix: Water

Date Received: 06/14/19 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/17/19 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		63 - 125		06/17/19 20:16	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			06/24/19 19:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/24/19 19:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/24/19 19:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/24/19 19:15	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/24/19 19:15	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/24/19 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 121		06/24/19 19:15	1
4-Bromofluorobenzene (Surr)	100		59 - 120		06/24/19 19:15	1
Toluene-d8 (Surr)	104		70 - 123		06/24/19 19:15	1
Dibromofluoromethane (Surr)	105		75 - 128		06/24/19 19:15	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-20\_061219**

**Lab Sample ID: 240-114386-2**

Date Collected: 06/12/19 12:30

Matrix: Water

Date Received: 06/14/19 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L	-		06/17/19 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		63 - 125		06/17/19 20:42	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	-		06/24/19 19:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L	-		06/24/19 19:40	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L	-		06/24/19 19:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L	-		06/24/19 19:40	1
Trichloroethene	1.0	U	1.0	0.10	ug/L	-		06/24/19 19:40	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L	-		06/24/19 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		70 - 121		06/24/19 19:40	1
4-Bromofluorobenzene (Surr)	99		59 - 120		06/24/19 19:40	1
Toluene-d8 (Surr)	102		70 - 123		06/24/19 19:40	1
Dibromofluoromethane (Surr)	105		75 - 128		06/24/19 19:40	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-37\_061219**

**Lab Sample ID: 240-114386-3**

Date Collected: 06/12/19 16:30

Matrix: Water

Date Received: 06/14/19 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/17/19 21:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		63 - 125		06/17/19 21:07	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			06/24/19 20:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/24/19 20:05	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/24/19 20:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/24/19 20:05	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/24/19 20:05	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/24/19 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 121		06/24/19 20:05	1
4-Bromofluorobenzene (Surr)	100		59 - 120		06/24/19 20:05	1
Toluene-d8 (Surr)	102		70 - 123		06/24/19 20:05	1
Dibromofluoromethane (Surr)	106		75 - 128		06/24/19 20:05	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-47\_061219**

**Lab Sample ID: 240-114386-4**

Date Collected: 06/12/19 14:30

Matrix: Water

Date Received: 06/14/19 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/18/19 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		63 - 125		06/18/19 18:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	4.0	U	4.0	0.76	ug/L			06/25/19 15:28	4
<b>cis-1,2-Dichloroethene</b>	<b>25</b>		4.0	0.64	ug/L			06/25/19 15:28	4
Tetrachloroethene	4.0	U	4.0	0.60	ug/L			06/25/19 15:28	4
<b>trans-1,2-Dichloroethene</b>	<b>5.3</b>		4.0	0.76	ug/L			06/25/19 15:28	4
Trichloroethene	4.0	U	4.0	0.40	ug/L			06/25/19 15:28	4
<b>Vinyl chloride</b>	<b>120</b>		4.0	0.80	ug/L			06/25/19 15:28	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 121		06/25/19 15:28	4
4-Bromofluorobenzene (Surr)	88		59 - 120		06/25/19 15:28	4
Toluene-d8 (Surr)	98		70 - 123		06/25/19 15:28	4
Dibromofluoromethane (Surr)	109		75 - 128		06/25/19 15:28	4

# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-114386-5**

**Date Collected: 06/12/19 00:00**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/24/19 20:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/24/19 20:54	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/24/19 20:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/24/19 20:54	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/24/19 20:54	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/24/19 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122	X	70 - 121		06/24/19 20:54	1
4-Bromofluorobenzene (Surr)	100		59 - 120		06/24/19 20:54	1
Toluene-d8 (Surr)	102		70 - 123		06/24/19 20:54	1
Dibromofluoromethane (Surr)	109		75 - 128		06/24/19 20:54	1

# Surrogate Summary

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-121)	BFB (59-120)	TOL (70-123)	DBFM (75-128)
240-114386-1	MW-14_061219	119	100	104	105
240-114386-2	MW-20_061219	118	99	102	105
240-114386-3	MW-37_061219	119	100	102	106
240-114386-4	MW-47_061219	106	88	98	109
240-114386-4 MS	MW-47_061219	104	87	95	106
240-114386-4 MSD	MW-47_061219	109	89	97	112
240-114386-5	TRIP BLANK	122 X	100	102	109
LCS 240-387869/5	Lab Control Sample	111	106	106	100
LCS 240-388136/6	Lab Control Sample	108	90	105	111
MB 240-387869/8	Method Blank	118	100	102	107
MB 240-388136/9	Method Blank	113	90	103	112

#### 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)
240-114386-1	MW-14_061219	121
240-114386-2	MW-20_061219	115
240-114386-3	MW-37_061219	109
240-114386-4	MW-47_061219	112
240-114386-4 MS	MW-47_061219	110
240-114386-4 MSD	MW-47_061219	108
LCS 240-386517/4	Lab Control Sample	99
LCS 240-386776/4	Lab Control Sample	105
MB 240-386517/5	Method Blank	105
MB 240-386776/5	Method Blank	109

#### Surrogate Legend

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

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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

**Lab Sample ID: MB 240-387869/8**  
**Matrix: Water**  
**Analysis Batch: 387869**

**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			06/24/19 13:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/24/19 13:16	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/24/19 13:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/24/19 13:16	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/24/19 13:16	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/24/19 13:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		70 - 121		06/24/19 13:16	1
4-Bromofluorobenzene (Surr)	100		59 - 120		06/24/19 13:16	1
Toluene-d8 (Surr)	102		70 - 123		06/24/19 13:16	1
Dibromofluoromethane (Surr)	107		75 - 128		06/24/19 13:16	1

**Lab Sample ID: LCS 240-387869/5**  
**Matrix: Water**  
**Analysis Batch: 387869**

**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	18.9		ug/L		94	65 - 139
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	76 - 128
Tetrachloroethene	20.0	19.6		ug/L		98	74 - 130
trans-1,2-Dichloroethene	20.0	19.5		ug/L		98	78 - 133
Trichloroethene	20.0	18.9		ug/L		94	76 - 125
Vinyl chloride	20.0	24.3		ug/L		122	58 - 143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		70 - 121
4-Bromofluorobenzene (Surr)	106		59 - 120
Toluene-d8 (Surr)	106		70 - 123
Dibromofluoromethane (Surr)	100		75 - 128

**Lab Sample ID: MB 240-388136/9**  
**Matrix: Water**  
**Analysis Batch: 388136**

**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			06/25/19 14:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/19 14:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/19 14:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/19 14:04	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/19 14:04	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/19 14:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 121		06/25/19 14:04	1
4-Bromofluorobenzene (Surr)	90		59 - 120		06/25/19 14:04	1
Toluene-d8 (Surr)	103		70 - 123		06/25/19 14:04	1

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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

**Lab Sample ID: MB 240-388136/9**  
**Matrix: Water**  
**Analysis Batch: 388136**

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	112		75 - 128		06/25/19 14:04	1

**Lab Sample ID: LCS 240-388136/6**  
**Matrix: Water**  
**Analysis Batch: 388136**

**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	23.9		ug/L		120	65 - 139	
cis-1,2-Dichloroethene	20.0	21.5		ug/L		107	76 - 128	
Tetrachloroethene	20.0	18.7		ug/L		93	74 - 130	
trans-1,2-Dichloroethene	20.0	23.5		ug/L		117	78 - 133	
Trichloroethene	20.0	20.0		ug/L		100	76 - 125	
Vinyl chloride	20.0	23.5		ug/L		117	58 - 143	

  

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		70 - 121
4-Bromofluorobenzene (Surr)	90		59 - 120
Toluene-d8 (Surr)	105		70 - 123
Dibromofluoromethane (Surr)	111		75 - 128

**Lab Sample ID: 240-114386-4 MS**  
**Matrix: Water**  
**Analysis Batch: 388136**

**Client Sample ID: MW-47\_061219**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
1,1-Dichloroethene	4.0	U	80.0	86.8		ug/L		108	53 - 140	
cis-1,2-Dichloroethene	25		80.0	99.8		ug/L		94	64 - 130	
Tetrachloroethene	4.0	U	80.0	62.9		ug/L		79	51 - 136	
trans-1,2-Dichloroethene	5.3		80.0	88.3		ug/L		104	68 - 133	
Trichloroethene	4.0	U	80.0	69.6		ug/L		87	55 - 131	
Vinyl chloride	120		80.0	203		ug/L		108	43 - 154	

  

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		70 - 121
4-Bromofluorobenzene (Surr)	87		59 - 120
Toluene-d8 (Surr)	95		70 - 123
Dibromofluoromethane (Surr)	106		75 - 128

**Lab Sample ID: 240-114386-4 MSD**  
**Matrix: Water**  
**Analysis Batch: 388136**

**Client Sample ID: MW-47\_061219**  
**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	4.0	U	80.0	90.7		ug/L		113	53 - 140	4	35	
cis-1,2-Dichloroethene	25		80.0	105		ug/L		101	64 - 130	5	21	
Tetrachloroethene	4.0	U	80.0	67.0		ug/L		84	51 - 136	6	23	
trans-1,2-Dichloroethene	5.3		80.0	94.7		ug/L		112	68 - 133	7	24	
Trichloroethene	4.0	U	80.0	75.5		ug/L		94	55 - 131	8	23	

Eurofins TestAmerica, Canton



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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

Lab Sample ID: 240-114386-4 MSD

Matrix: Water

Analysis Batch: 388136

Client Sample ID: MW-47\_061219

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	120		80.0	196		ug/L		100	43 - 154	3	29
<b>Surrogate</b>	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	109		70 - 121								
4-Bromofluorobenzene (Surr)	89		59 - 120								
Toluene-d8 (Surr)	97		70 - 123								
Dibromofluoromethane (Surr)	112		75 - 128								

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

Lab Sample ID: MB 240-386517/5

Matrix: Water

Analysis Batch: 386517

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			06/17/19 11:27	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		63 - 125					06/17/19 11:27	1

Lab Sample ID: LCS 240-386517/4

Matrix: Water

Analysis Batch: 386517

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	10.9		ug/L		109	59 - 131
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	99		63 - 125				

Lab Sample ID: MB 240-386776/5

Matrix: Water

Analysis Batch: 386776

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			06/18/19 12:37	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		63 - 125					06/18/19 12:37	1

Lab Sample ID: LCS 240-386776/4

Matrix: Water

Analysis Batch: 386776

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	10.9		ug/L		109	59 - 131

Eurofins TestAmerica, Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

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

**Lab Sample ID: LCS 240-386776/4**  
**Matrix: Water**  
**Analysis Batch: 386776**

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

	<i>LCS</i>	<i>LCS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	105	U	63 - 125

**Lab Sample ID: 240-114386-4 MS**  
**Matrix: Water**  
**Analysis Batch: 386776**

**Client Sample ID: MW-47\_061219**  
**Prep Type: Total/NA**

	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MS</i>	<i>MS</i>				<i>%Rec.</i>
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
1,4-Dioxane	2.0	U	10.0	11.1	U	ug/L	-	111	52 - 129
<i>Surrogate</i>	<i>MS</i>	<i>MS</i>	<i>Limits</i>						
1,2-Dichloroethane-d4 (Surr)	110	U	63 - 125						

**Lab Sample ID: 240-114386-4 MSD**  
**Matrix: Water**  
**Analysis Batch: 386776**

**Client Sample ID: MW-47\_061219**  
**Prep Type: Total/NA**

	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MSD</i>	<i>MSD</i>				<i>%Rec.</i>		<i>RPD</i>
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
1,4-Dioxane	2.0	U	10.0	11.2	U	ug/L	-	112	52 - 129	1	13
<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>								
1,2-Dichloroethane-d4 (Surr)	108	U	63 - 125								

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

## GC/MS VOA

### Analysis Batch: 386517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-114386-1	MW-14_061219	Total/NA	Water	8260B SIM	
240-114386-2	MW-20_061219	Total/NA	Water	8260B SIM	
240-114386-3	MW-37_061219	Total/NA	Water	8260B SIM	
MB 240-386517/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-386517/4	Lab Control Sample	Total/NA	Water	8260B SIM	

### Analysis Batch: 386776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-114386-4	MW-47_061219	Total/NA	Water	8260B SIM	
MB 240-386776/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-386776/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-114386-4 MS	MW-47_061219	Total/NA	Water	8260B SIM	
240-114386-4 MSD	MW-47_061219	Total/NA	Water	8260B SIM	

### Analysis Batch: 387869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-114386-1	MW-14_061219	Total/NA	Water	8260B	
240-114386-2	MW-20_061219	Total/NA	Water	8260B	
240-114386-3	MW-37_061219	Total/NA	Water	8260B	
240-114386-5	TRIP BLANK	Total/NA	Water	8260B	
MB 240-387869/8	Method Blank	Total/NA	Water	8260B	
LCS 240-387869/5	Lab Control Sample	Total/NA	Water	8260B	

### Analysis Batch: 388136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-114386-4	MW-47_061219	Total/NA	Water	8260B	
MB 240-388136/9	Method Blank	Total/NA	Water	8260B	
LCS 240-388136/6	Lab Control Sample	Total/NA	Water	8260B	
240-114386-4 MS	MW-47_061219	Total/NA	Water	8260B	
240-114386-4 MSD	MW-47_061219	Total/NA	Water	8260B	

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Ford LTP Livonia MI - E203728

Job ID: 240-114386-1

**Client Sample ID: MW-14\_061219**

**Lab Sample ID: 240-114386-1**

**Date Collected: 06/12/19 10:30**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	387869	06/24/19 19:15	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	386517	06/17/19 20:16	SAM	TAL CAN

**Client Sample ID: MW-20\_061219**

**Lab Sample ID: 240-114386-2**

**Date Collected: 06/12/19 12:30**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	387869	06/24/19 19:40	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	386517	06/17/19 20:42	SAM	TAL CAN

**Client Sample ID: MW-37\_061219**

**Lab Sample ID: 240-114386-3**

**Date Collected: 06/12/19 16:30**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	387869	06/24/19 20:05	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	386517	06/17/19 21:07	SAM	TAL CAN

**Client Sample ID: MW-47\_061219**

**Lab Sample ID: 240-114386-4**

**Date Collected: 06/12/19 14:30**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	388136	06/25/19 15:28	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	386776	06/18/19 18:51	SAM	TAL CAN

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-114386-5**

**Date Collected: 06/12/19 00:00**

**Matrix: Water**

**Date Received: 06/14/19 08:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	387869	06/24/19 20:54	HMB	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 - E203728

Job ID: 240-114386-1

## 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		2927	02-23-20
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Florida	NELAP		E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19 *
Illinois	NELAP		004498	07-31-19
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
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	06-30-20
New Jersey	NELAP		OH001	06-30-19
New York	NELAP	2	10975	03-31-20
New York	NELAP		10975	03-31-20
Ohio VAP	State Program	5	CL0024	06-05-21
Oregon	NELAP	10	4062	02-23-20
Oregon	NELAP		4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Pennsylvania	NELAP		68-00340	08-31-19
Texas	NELAP	6	T104704517-18-10	08-31-19 *
Texas	NELAP		T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19 *
Virginia	NELAP		010101	09-14-19
Washington	State		C971	01-12-20
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.



<b>Client Information</b> Company: ARCADIS U.S., Inc. Address: 28550 Cabot Drive Suite 500 City: Novi State, Zip: MI, 48377 Phone:		Lab P.M.: Deimonico, Michael E-Mail: michael.deimonico@lestamerica.com Phone: 586 140 9754		Carrier Tracking No(s): COC No: 240-61361-26116.2 Page: Page 2 of 10 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): 10 day / standard PO #: 0004-0001B MI001454-0006-00001 WO #: Cadena #: E203634-72B Project #: 24015353 SSOW#:		<b>Analysis Requested</b> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> A Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> A 8260B, 8260B_SIM 8260B - VOCs (Short List)			
<b>Sample Identification</b> MW-14-061219 MW-20-061219 MW-37-061219 MW-47-061219 MW-47-MS/MSD-061219 Trip Blank		Sample Date 6/12/19 6/12/19 6/12/19 6/12/19 6/12/19 6/12/19	Sample Time 1030 1230 1030 1430 1430 -	Sample Type G G G G G -	Matrix Water Water Water Water Water Water
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Special Instructions/Note:</b> Total Number of containers:			
<b>Deliverable Requested:</b> I, II, III, IV, Other (specify)		<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>Empty Kit Relinquished by:</b> Emmk Witherspoon		<b>Method of Shipment:</b> Date: 6/12/19 1730 Company: Arcadis			
<b>Relinquished by:</b> Mary-Catherine Goddard		Date: 6/12/19 19:10 Company: Arcadis			
<b>Relinquished by:</b> RACHEL BIELAK		Date: 6/13/19 0950 Company: Arcadis			
<b>Custody Seals Intact:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No:		Date: 6-13-19 1505 Company: Arcadis			
<b>Cooler Temperature:</b> 815 Other Remarks:		Date: 6-13-19 0951 Company: Arcadis			



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

<b>Eurofins TestAmerica Canton Sample Receipt Form/Narrative</b>				Login # : <u>114386</u>	
<b>Canton Facility</b>					
Client <u>Areadis</u>		Site Name _____		Cooler unpacked by: <u>[Signature]</u>	
Cooler Received on <u>6-14-19</u>		Opened on <u>6-19-19</u>			
FedEx: 1 <sup>st</sup> <input checked="" type="checkbox"/> Grd Exp		UPS FAS Clipper		Client Drop Off TestAmerica Courier Other	
<b>Receipt After-hours: Drop-off Date/Time</b>				<b>Storage Location</b>	
TestAmerica Cooler # <u>TA</u>		Foam Box Client Cooler		Box Other _____	
Packing material used: <u>Bubble Wrap</u>		Foam <u>Plastic Bag</u>		None Other _____	
COOLANT: <u>Wet Ice</u>		Blue Ice Dry Ice Water		None	
1. Cooler temperature upon receipt		<input checked="" type="checkbox"/> See Multiple Cooler Form			
IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp. _____ °C		Corrected Cooler Temp. <u>1</u> °C			
IR GUN #36 (CF +0.6°C) Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C			
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>2</u>		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 <u>No</u>			
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 <u>NA</u> pH Strip Lot# <u>HC984738</u>			
13. Were VOAs on the COC?		Yes No			
14. Were air bubbles >6 mm in any VOA vials?  Larger than this.		Yes <u>No</u> NA			
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # <u>B832702VA</u>		Yes No			
16. Was a LL Hg or Me Hg trip blank present?		Yes <u>No</u>			
Contacted PM _____ Date _____ by _____		via Verbal Voice Mail Other			
Concerning _____					
<b>17. CHAIN OF CUSTODY &amp; SAMPLE DISCREPANCIES</b>				Samples processed by: <u>Ann</u>	
_____					
_____					
_____					
<b>18. SAMPLE CONDITION</b>					
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)					
<b>19. SAMPLE PRESERVATION</b>					
Sample(s) _____ were further preserved in the laboratory.					
Time preserved: _____ Preservative(s) added/Lot number(s): _____					
VOA Sample Preservation - Date/Time VOAs Frozen: _____					

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



