## **ANALYTICAL REPORT**

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

Laboratory Job ID: 240-119209-1

Client Project/Site: Ford LTP Livonia MI - E203631

For:

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

Attn: Kristoffer Hinskey

Mode Delfour

Authorized for release by: 10/4/2019 2:05:01 PM

Michael DelMonico, Project Manager I (330)497-9396

michael.delmonico@testamericainc.com

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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.

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## **Definitions/Glossary**

Client: ARCADIS U.S., Inc. Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

### **Qualifiers**

| 0 |   | / B. A | 0 | ١, |   | A |
|---|---|--------|---|----|---|---|
| G | U | IVI    | 3 | v  | U | A |

Qualifier **Qualifier Description** 

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

### **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 |
| 0/ D         | Descent Descent                                                                            |

Percent Recovery %R 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

Decision Level Concentration (Radiochemistry) DLC

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

**PQL** Practical Quantitation Limit

QC **Quality Control** 

Relative Error Ratio (Radiochemistry) **RER** 

RLReporting 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.

Job ID: 240-119209-1 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-119209-1

Laboratory: Eurofins TestAmerica, Canton

**Narrative** 

### **CASE NARRATIVE**

Client: ARCADIS U.S., Inc.

Project: Ford LTP Livonia MI - E203631

Report Number: 240-119209-1

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 9/20/2019 8:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

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

Samples MW-79SR 091819 (240-119209-1) and TRIP BLANK (240-119209-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/30/2019.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-403178.

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

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

Sample MW-79SR 091819 (240-119209-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 09/26/2019.

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

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

Job ID: 240-119209-1

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## **Sample Summary**

Client: ARCADIS U.S., Inc.

Project/Site: Ford LTP Livonia MI - E203631

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 240-119209-1  | MW-79SR_091819   | Water  | 09/18/19 16:00 | 09/20/19 08:25 |          |
| 240-119209-2  | TRIP BLANK       | Water  | 09/18/19 00:00 | 09/20/19 08:25 |          |

Job ID: 240-119209-1

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## **Detection Summary**

Client: ARCADIS U.S., Inc. Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

| Analyte        | Result ( | Qualifier | RL  | MDL  | Unit | Dil F | ac I | O Method | Prep Type |
|----------------|----------|-----------|-----|------|------|-------|------|----------|-----------|
| Vinyl chloride | 0.40     | J         | 1.0 | 0.20 | ug/L |       | 1    | 8260B    | Total/NA  |

| Client Sample ID: TRIP BLANK | Lab Sample ID: 240-119209-2 |
|------------------------------|-----------------------------|
|                              |                             |

No Detections.

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## **Client Sample Results**

Client: ARCADIS U.S., Inc. Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

Client Sample ID: MW-79SR\_091819

Lab Sample ID: 240-119209-1 Date Collected: 09/18/19 16:00 **Matrix: Water** 

Date Received: 09/20/19 08:25

| Analyte                      | Result    | Qualifier | RL       | MDL Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|-----------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 2.0       | U         | 2.0      | 0.86 ug/L |   |          | 09/26/19 20:45 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |           |   | Prepared | Analyzed       | Dil Fac |
| 1.2-Dichloroethane-d4 (Surr) | 71        |           | 63 - 125 |           |   |          | 09/26/19 20:45 |         |

| Analyte                       | Result    | Qualifier | RL     | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|--------|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene            | 1.0       | U         | 1.0    | 0.19 | ug/L |   |          | 09/30/19 21:54 | 1       |
| cis-1,2-Dichloroethene        | 1.0       | U         | 1.0    | 0.16 | ug/L |   |          | 09/30/19 21:54 | 1       |
| Tetrachloroethene             | 1.0       | U         | 1.0    | 0.15 | ug/L |   |          | 09/30/19 21:54 | 1       |
| trans-1,2-Dichloroethene      | 1.0       | U         | 1.0    | 0.19 | ug/L |   |          | 09/30/19 21:54 | 1       |
| Trichloroethene               | 1.0       | U         | 1.0    | 0.10 | ug/L |   |          | 09/30/19 21:54 | 1       |
| Vinyl chloride                | 0.40      | J         | 1.0    | 0.20 | ug/L |   |          | 09/30/19 21:54 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits |      |      |   | Prepared | Analyzed       | Dil Fac |
| 4.0 Diablementher and 4.00 mm |           |           | 70 404 |      |      | - |          | 00/20/40 04-54 |         |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|-------------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 100       |           | 70 - 121 | 09/30/19 21:54    | 1       |
| 4-Bromofluorobenzene (Surr)  | 104       |           | 59 - 120 | 09/30/19 21:54    | 1       |
| Toluene-d8 (Surr)            | 100       |           | 70 - 123 | 09/30/19 21:54    | 1       |
| Dibromofluoromethane (Surr)  | 105       |           | 75 - 128 | 09/30/19 21:54    | 1       |

## **Client Sample Results**

Client: ARCADIS U.S., Inc. Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

**Client Sample ID: TRIP BLANK** 

Lab Sample ID: 240-119209-2 Date Collected: 09/18/19 00:00

**Matrix: Water** Date Received: 09/20/19 08:25

| Method: 8260B - Volatile O   | rganic Compo | unds (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 |   |          | 09/30/19 22:18 | 1       |
| cis-1,2-Dichloroethene       | 1.0          | U         | 1.0      | 0.16 | ug/L |   |          | 09/30/19 22:18 | 1       |
| Tetrachloroethene            | 1.0          | U         | 1.0      | 0.15 | ug/L |   |          | 09/30/19 22:18 | 1       |
| trans-1,2-Dichloroethene     | 1.0          | Ü         | 1.0      | 0.19 | ug/L |   |          | 09/30/19 22:18 | 1       |
| Trichloroethene              | 1.0          | U         | 1.0      | 0.10 | ug/L |   |          | 09/30/19 22:18 | 1       |
| Vinyl chloride               | 1.0          | U         | 1.0      | 0.20 | ug/L |   |          | 09/30/19 22:18 | 1       |
| Surrogate                    | %Recovery    | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 95           |           | 70 - 121 |      |      |   |          | 09/30/19 22:18 | 1       |
| 4-Bromofluorobenzene (Surr)  | 101          |           | 59 - 120 |      |      |   |          | 09/30/19 22:18 | 1       |
| Toluene-d8 (Surr)            | 96           |           | 70 - 123 |      |      |   |          | 09/30/19 22:18 | 1       |
| Dibromofluoromethane (Surr)  | 100          |           | 75 - 128 |      |      |   |          | 09/30/19 22:18 | 1       |

## **Surrogate Summary**

Client: ARCADIS U.S., Inc. Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

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

**Matrix: Water Prep Type: Total/NA** 

|                   |                    |          | Pe       | ercent Surre | ogate Reco |
|-------------------|--------------------|----------|----------|--------------|------------|
|                   |                    | DCA      | BFB      | TOL          | DBFM       |
| Lab Sample ID     | Client Sample ID   | (70-121) | (59-120) | (70-123)     | (75-128)   |
| 240-119209-1      | MW-79SR_091819     | 100      | 104      | 100          | 105        |
| 240-119209-2      | TRIP BLANK         | 95       | 101      | 96           | 100        |
| LCS 240-403178/5  | Lab Control Sample | 89       | 99       | 97           | 96         |
| LCSD 240-403178/6 | Lab Control Sample | 89       | 100      | 98           | 92         |
| MB 240-403178/9   | Method Blank       | 95       | 101      | 94           | 99         |
| Surrogato Logond  |                    |          |          |              |            |

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

|                    |                        | DCA      |  |
|--------------------|------------------------|----------|--|
| Lab Sample ID      | Client Sample ID       | (63-125) |  |
| 240-119202-D-1 MS  | Matrix Spike           | 73       |  |
| 240-119202-D-1 MSD | Matrix Spike Duplicate | 72       |  |
| 240-119209-1       | MW-79SR_091819         | 71       |  |
| LCS 240-402640/4   | Lab Control Sample     | 72       |  |
| MB 240-402640/5    | Method Blank           | 72       |  |

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

Project/Site: Ford LTP Livonia MI - E203631

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

Lab Sample ID: MB 240-403178/9

**Matrix: Water** 

Analysis Batch: 403178

| Client | Sample | ID: N                | /letho | d Blan | k |
|--------|--------|----------------------|--------|--------|---|
|        | Pre    | ε <mark>p Τ</mark> ν | /pe: T | otal/N | Α |

Job ID: 240-119209-1

| Allalysis Datell. 400170 |        |           |     |      |      |   |          |                |         |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| -                        | MB     | MB        |     |      |      |   |          |                |         |
| Analyte                  | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
| 1,1-Dichloroethene       | 1.0    | U         | 1.0 | 0.19 | ug/L |   |          | 09/30/19 13:41 | 1       |
| cis-1,2-Dichloroethene   | 1.0    | U         | 1.0 | 0.16 | ug/L |   |          | 09/30/19 13:41 | 1       |
| Tetrachloroethene        | 1.0    | U         | 1.0 | 0.15 | ug/L |   |          | 09/30/19 13:41 | 1       |
| trans-1,2-Dichloroethene | 1.0    | U         | 1.0 | 0.19 | ug/L |   |          | 09/30/19 13:41 | 1       |
| Trichloroethene          | 1.0    | U         | 1.0 | 0.10 | ug/L |   |          | 09/30/19 13:41 | 1       |
| Vinyl chloride           | 1.0    | U         | 1.0 | 0.20 | ug/L |   |          | 09/30/19 13:41 | 1       |
|                          |        |           |     |      |      |   |          |                |         |

| ME                              | B MB        |          |                   |         |
|---------------------------------|-------------|----------|-------------------|---------|
| Surrogate %Recovery             | / Qualifier | Limits   | Prepared Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) 95 | 5           | 70 - 121 | 09/30/19 13:41    | 1       |
| 4-Bromofluorobenzene (Surr) 101 | 1           | 59 - 120 | 09/30/19 13:41    | 1       |
| Toluene-d8 (Surr) 94            | 1           | 70 - 123 | 09/30/19 13:41    | 1       |
| Dibromofluoromethane (Surr) 99  | )           | 75 - 128 | 09/30/19 13:41    | 1       |

Lab Sample ID: LCS 240-403178/5

**Matrix: Water** 

**Analysis Batch: 403178** 

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

| Allalysis Batoli. 400170 |       |          |                |               |      |                     |  |
|--------------------------|-------|----------|----------------|---------------|------|---------------------|--|
| •                        | Spike | LCS L    | LCS            |               |      | %Rec.               |  |
| Analyte                  | Added | Result ( | Qualifier Unit | D             | %Rec | Limits              |  |
| 1,1-Dichloroethene       | 20.0  | 19.0     | ug/L           | <del></del> _ | 95   | 65 - 139            |  |
| cis-1,2-Dichloroethene   | 20.0  | 17.5     | ug/L           |               | 87   | 76 - 128            |  |
| Tetrachloroethene        | 20.0  | 18.3     | ug/L           |               | 91   | 74 - 130            |  |
| trans-1,2-Dichloroethene | 20.0  | 19.1     | ug/L           |               | 96   | 78 - 133            |  |
| Trichloroethene          | 20.0  | 18.3     | ug/L           |               | 91   | 76 - 125            |  |
| Vinyl chloride           | 20.0  | 17.4     | ug/L           |               | 87   | 58 <sub>-</sub> 143 |  |

|                              | LCS       | LCS       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 89        |           | 70 - 121 |
| 4-Bromofluorobenzene (Surr)  | 99        |           | 59 - 120 |
| Toluene-d8 (Surr)            | 97        |           | 70 - 123 |
| Dibromofluoromethane (Surr)  | 96        |           | 75 - 128 |

Lab Sample ID: LCSD 240-403178/6

**Matrix: Water** 

**Analysis Batch: 403178** 

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

|                          | Spike | LCS    | LCS       |      |   |      | %Rec.    |  |
|--------------------------|-------|--------|-----------|------|---|------|----------|--|
| Analyte                  | Added | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| 1,1-Dichloroethene       | 20.0  | 20.1   |           | ug/L |   | 101  | 65 - 139 |  |
| cis-1,2-Dichloroethene   | 20.0  | 19.1   |           | ug/L |   | 96   | 76 - 128 |  |
| Tetrachloroethene        | 20.0  | 19.8   |           | ug/L |   | 99   | 74 - 130 |  |
| trans-1,2-Dichloroethene | 20.0  | 20.6   |           | ug/L |   | 103  | 78 - 133 |  |
| Trichloroethene          | 20.0  | 20.1   |           | ug/L |   | 100  | 76 - 125 |  |
| Vinyl chloride           | 20.0  | 17.7   |           | ug/L |   | 89   | 58 - 143 |  |

|                              | LCS       | LCS       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 89        |           | 70 - 121 |
| 4-Bromofluorobenzene (Surr)  | 100       |           | 59 - 120 |
| Toluene-d8 (Surr)            | 98        |           | 70 - 123 |

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Job ID: 240-119209-1

Client: ARCADIS U.S., Inc.

Project/Site: Ford LTP Livonia MI - E203631

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

Lab Sample ID: LCSD 240-403178/6

**Matrix: Water** 

**Analysis Batch: 403178** 

LCS LCS

Limits Surrogate %Recovery Qualifier Dibromofluoromethane (Surr) 75 - 128 92

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

Dil Fac

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

Lab Sample ID: MB 240-402640/5

**Matrix: Water** 

**Analysis Batch: 402640** 

MB MB

Analyte Result Qualifier 1,4-Dioxane 2.0 U

MB MB

%Recovery Qualifier 72

**MDL** Unit 0.86 ug/L

LCS LCS

MS MS

MSD MSD

12.7

Result Qualifier

12.3

Result Qualifier

11.5

Result Qualifier

RL

2.0

Limits

Spike

Added

I imits

63 - 125

Spike

Added

Limits

63 - 125

Spike

Added

10.0

10.0

10.0

63 - 125

Unit

ug/L

Unit

ug/L

Unit

ug/L

Prepared

%Rec

%Rec

127

115

Prepared

Analyzed Dil Fac 09/26/19 12:48

Analyzed

09/26/19 12:48

Prep Type: Total/NA

10

Lab Sample ID: LCS 240-402640/4

**Matrix: Water** 

Surrogate

**Analysis Batch: 402640** 

1,2-Dichloroethane-d4 (Surr)

Analyte 1.4-Dioxane

Surrogate 1,2-Dichloroethane-d4 (Surr)

%Recovery Qualifier 72

Sample Sample

2.0 U

MS MS

Sample Sample

2.0 U

Result Qualifier

%Recovery Qualifier

73

Result Qualifier

LCS LCS

Lab Sample ID: 240-119202-D-1 MS

**Matrix: Water** 

1.4-Dioxane

1,4-Dioxane

**Analysis Batch: 402640** 

Analyte

Surrogate

1,2-Dichloroethane-d4 (Surr)

Lab Sample ID: 240-119202-D-1 MSD **Matrix: Water** 

**Analysis Batch: 402640** 

Analyte

MSD MSD Surrogate %Recovery Qualifier

1,2-Dichloroethane-d4 (Surr)

Limits 72 63 - 125 **Client Sample ID: Lab Control Sample** 

Limits

59 - 131

Client Sample ID: Method Blank

Prep Type: Total/NA

%Rec.

**Client Sample ID: Matrix Spike** 

Prep Type: Total/NA

%Rec.

Limits D %Rec

123 52 - 129

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

%Rec. **RPD** 

Limits **RPD** Limit 52 - 129

Eurofins TestAmerica, Canton

## **QC Association Summary**

Client: ARCADIS U.S., Inc.

Job ID: 240-119209-1 Project/Site: Ford LTP Livonia MI - E203631

## **GC/MS VOA**

### Analysis Batch: 402640

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method    | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 240-119209-1       | MW-79SR_091819         | Total/NA  | Water  | 8260B SIM |            |
| MB 240-402640/5    | Method Blank           | Total/NA  | Water  | 8260B SIM |            |
| LCS 240-402640/4   | Lab Control Sample     | Total/NA  | Water  | 8260B SIM |            |
| 240-119202-D-1 MS  | Matrix Spike           | Total/NA  | Water  | 8260B SIM |            |
| 240-119202-D-1 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260B SIM |            |

### **Analysis Batch: 403178**

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 240-119209-1      | MW-79SR_091819     | Total/NA  | Water  | 8260B  |            |
| 240-119209-2      | TRIP BLANK         | Total/NA  | Water  | 8260B  |            |
| MB 240-403178/9   | Method Blank       | Total/NA  | Water  | 8260B  |            |
| LCS 240-403178/5  | Lab Control Sample | Total/NA  | Water  | 8260B  |            |
| LCSD 240-403178/6 | Lab Control Sample | Total/NA  | Water  | 8260B  |            |

### **Lab Chronicle**

Client: ARCADIS U.S., Inc.

Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

Date Collected: 09/18/19 16:00 Matrix: Water Date Received: 09/20/19 08:25

|           | Batch    | Batch     |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type     | Method    | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 8260B     |     |          | 403178 | 09/30/19 21:54 | HMB     | TAL CAN |
| Total/NA  | Analysis | 8260B SIM |     | 1        | 402640 | 09/26/19 20:45 | SAM     | TAL CAN |

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-119209-2

Date Collected: 09/18/19 00:00 Matrix: Water

Date Received: 09/20/19 08:25

|           | Batch    | Batch  |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|--------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type     | Method | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 8260B  |     | 1        | 403178 | 09/30/19 22:18 | HMB     | TAL CAN |

**Laboratory References:** 

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

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## **Accreditation/Certification Summary**

Client: ARCADIS U.S., Inc.

Job ID: 240-119209-1

Project/Site: Ford LTP Livonia MI - E203631

### **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                  | 02-23-20        |
| Connecticut           | State               | PH-0590               | 12-31-19        |
| Florida               | NELAP               | E87225                | 06-30-20        |
| Georgia               | State               | 4062                  | 02-23-20        |
| Illinois              | NELAP               | 004498                | 07-31-20        |
| lowa                  | State               | 421                   | 06-01-20        |
| Kansas                | NELAP               | E-10336               | 04-30-20        |
| Kentucky (UST)        | State               | 112225                | 02-23-20        |
| Kentucky (WW)         | State               | KY98016               | 12-31-19        |
| Minnesota             | NELAP               | OH00048               | 12-31-19        |
| Minnesota (Petrofund) | State Program       | 3506                  | 07-31-21        |
| New Jersey            | NELAP               | OH001                 | 06-30-20        |
| New York              | NELAP               | 10975                 | 03-31-20        |
| Ohio VAP              | State               | CL0024                | 06-05-21        |
| Oregon                | NELAP               | 4062                  | 02-23-20        |
| Pennsylvania          | NELAP               | 68-00340              | 08-31-20        |
| Texas                 | NELAP               | T104704517-18-10      | 08-31-20        |
| USDA                  | US Federal Programs | P330-16-00404         | 12-28-19        |
| Virginia              | NELAP               | 010101                | 09-14-20        |
| Washington            | State               | C971                  | 01-12-20        |
| West Virginia DEP     | State               | 210                   | 12-31-19        |

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MICHIGAN

Chain of Custody Record

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

**TestAmerica** 

| ive, Suite 500 Telephone: 248-994-2240  Email: kristoffer.hinskey               |               |          |                             |               |               |                                          |          |                 |                    |            |                             | -        |                                                                                                                                            | -      |                                                  |
|---------------------------------------------------------------------------------|---------------|----------|-----------------------------|---------------|---------------|------------------------------------------|----------|-----------------|--------------------|------------|-----------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------|
|                                                                                 | мля пивкеу    |          |                             | Site Co       | nfact: Ks     | Site Contact: Rachel Bielak              | ak       |                 | _                  | ab Con     | Lab Contact: Mike DelMonico | e DelMo  | nico                                                                                                                                       | 202    | COC No:                                          |
|                                                                                 |               |          |                             | Telepho       | me: 248-      | Felephone: 248-946-6331                  |          |                 |                    | relephon   | Telephone: 330-497-9396     | 17-9396  |                                                                                                                                            |        |                                                  |
|                                                                                 |               |          |                             | - V           | Trees I to    | Analysis Turnaround Tim                  | Time     | -               | 1                  | 1          |                             | V V      | Anothere                                                                                                                                   |        | 1 of 1 cocs                                      |
|                                                                                 | (garcadis.con |          |                             |               | n seeking and | maronio                                  | ame .    |                 |                    | H          | F                           | Ans      | lyses                                                                                                                                      | For la | For lab use only                                 |
| Project Name: Ford LTP                                                          |               |          |                             | TAT if differ | mt fin        | om below  3 weeks                        | N ×      |                 |                    |            |                             |          |                                                                                                                                            | Walk   | Walk-in client                                   |
| Project Number: M1001454,0004,0002B Method of Shipment/Carrier:                 | rier:         |          |                             |               |               |                                          |          |                 |                    | 80         | 1800                        |          | _                                                                                                                                          |        | Samdanas                                         |
| PO # M1001454.0004.0002B Shipping/Tracking No:                                  |               |          |                             |               | L             | 1 day                                    |          |                 |                    |            |                             |          |                                                                                                                                            | Job/S  | lob/SDG No:                                      |
|                                                                                 | To the same   | Matrix   | X                           | Co            | ntainen       | Containen & Preservatives                | atives   |                 | -                  |            | _                           |          | _                                                                                                                                          | NO.    |                                                  |
| Sample Identification Sample Date Sample Time                                   | λίτ           | Sediment | Solld                       | FOSTH         | HCI           | \oldsymbol{\lambda} \text{HO}_R \text{N} | Unpres   | Filtered Sa     | 1,1-DCE 8          | cis-1,2-DC | bCE 85€0                    | TCE 8260 | Vinyl Chlo                                                                                                                                 |        | Sample Specific Notes /<br>Special Instructions: |
| MW-79519-091819 9/18/19 1600                                                    | X             |          |                             |               | ×             |                                          |          | N               | ×                  | X          | x                           | X        | ¥                                                                                                                                          | 9      | Cottles                                          |
| To postank (1)                                                                  |               |          |                             |               |               |                                          |          |                 |                    | +          |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 | - =           |          | _                           |               | ⇉▮            | #                                        | -        | 10              |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 | 1             |          |                             |               |               |                                          |          |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 | 240           | -11920   | 240-119209 Chain of Custody |               | # 20 A        |                                          |          |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 |               | _        | _                           | -             | alough .      | -                                        | 1 -      |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 |               |          |                             |               |               |                                          |          |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 |               |          |                             |               |               |                                          |          |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
|                                                                                 |               |          |                             |               |               |                                          |          |                 |                    |            |                             |          |                                                                                                                                            |        |                                                  |
| Possible Hazard Identification  Non-Hazard   Ianmable   cin Irritant   Poison B | Juknown       | wn       |                             | Sam           | Ple Dispo     | Return to Client                         | e may be | Disposal By Lab | f sample<br>3y Lab | s are re   | ained longer<br>Archive For | For F    | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  Return to Client F Disposal By Lab Archive For Months |        |                                                  |

| Eurofins TestAmerica Canton Sample Receipt Form/Narrative                                                                                                                                                                                                                                   | Login # : 19209                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canton Facility                                                                                                                                                                                                                                                                             | Cooler unpacked by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| lient Accuse Site Name                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| pooler Received on 9/20/19 Opened on 9/20/19                                                                                                                                                                                                                                                | D C D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| edEx: 1st Gpd Exp UPS FAS Clipper Client Drop Off TestAmer                                                                                                                                                                                                                                  | ica Courier Other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| eceipt After-hours: Drop-off Date/Time Storag                                                                                                                                                                                                                                               | ge Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| estAmerica Cooler # TAC Foam Box Client Cooler Box                                                                                                                                                                                                                                          | Other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Packing material used: Bubble Wrap Foam Pastic Bag None                                                                                                                                                                                                                                     | Other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| COOLANT: Wet Ice Blue Ice Dry Ice Water None                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cooler temperature upon receipt                                                                                                                                                                                                                                                             | ultiple Cooler Form ected Cooler Temp. 1. 9 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. (2 °C Corre                                                                                                                                                                                                                                | ected Cooler Temp °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity                                                                                                                                                                                                                  | Yes No NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul> <li>-Were the seals on the outside of the cooler(s) signed &amp; dated?</li> <li>-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?</li> </ul>                                                                                                                    | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| -Were tamper/custody seals intact and uncompromised?                                                                                                                                                                                                                                        | YES NO NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Shippers' packing slip attached to the cooler(s)?                                                                                                                                                                                                                                           | Yes No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Did custody papers accompany the sample(s)?                                                                                                                                                                                                                                                 | Ves No Tests that are not                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Were the custody papers relinquished & signed in the appropriate place?                                                                                                                                                                                                                     | No checked for pH by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Was/were the person(s) who collected the samples clearly identified on the                                                                                                                                                                                                                  | COC? Yes (No) Receiving:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Did all bottles arrive in good condition (Unbroken)?                                                                                                                                                                                                                                        | (es) No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Could all bottle labels be reconciled with the COC?                                                                                                                                                                                                                                         | VOAs Oil and Grease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Were correct bottle(s) used for the test(s) indicated?                                                                                                                                                                                                                                      | Keg No TOC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ). Sufficient quantity received to perform indicated analyses?                                                                                                                                                                                                                              | No No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1. Are these work share samples?                                                                                                                                                                                                                                                            | Yes 🐚                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| If yes, Questions 12-16 have been checked at the originating laboratory.                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?                                                                                                                                                   | Yes No (A) pH Strip Lot# HC991818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?                                                                                                                         | Yes No PA pH Strip Lot# HC991818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  4. Larger than this. 1                                                    | Yes No NA pH Strip Lot# HC991818 Yes No Yes NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Larger than this.  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # | Yes No NA pH Strip Lot# HC991818 Yes No Yes NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No Yes No Yes No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Larger than this.  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No Yes No Yes No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Larger than this.  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No NA Yes No Yes N |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No NA via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Larger than this.  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No NA via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Larger than this.  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # | Yes No NA  Yes No NA  Yes No NA  Yes No  Yes No  Yes O  Via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #                    | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No NA Via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #                    | Yes No NA pH Strip Lot# HC991818 Yes No NA Yes No NA Yes No NA via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #                    | Yes No NA pH Strip Lot# HC991818 Yes No Yes No Yes No Yes No Yes So Via Verbal Voice Mail Other  Samples processed by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA Yes No NA Yes No NA Yes No  |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA Yes No NA Yes No NA Yes No NA Via Verbal Voice Mail Other  Samples processed by:  **Mail Other**  Samples processed by:  **Mail Other**  **Mail Othe |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA Yes No NA Yes No NA Yes No NA Via Verbal Voice Mail Other  Samples processed by:  **Mail Other**  Samples processed by:  **Mail Other**  **Mail Othe |
| If yes, Questions 12-16 have been checked at the originating laboratory.  2. Were all preserved sample(s) at the correct pH upon receipt?  3. Were VOAs on the COC?  4. Were air bubbles >6 mm in any VOA vials?  5. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #        | Yes No NA Yes No |
| If yes, Questions 12-16 have been checked at the originating laboratory.  Were all preserved sample(s) at the correct pH upon receipt?  Were VOAs on the COC?  Were air bubbles >6 mm in any VOA vials?  Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #                    | Yes No NA Via Verbal Voice Mail Other  Samples processed by:  mended holding time had expired. were received in a broken container. ubble >6 mm in diameter. (Notify PM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |