

ANALYTICAL REPORT

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Laboratory Job ID: 460-197430-1
Client Project/Site: Ford LTP On-Site

For:
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Authorized for release by:
11/30/2019 4:31:20 PM

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.
Project/Site: Ford LTP On-Site

Job ID: 460-197430-1

Qualifiers

GC/MS VOA

| 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. |
| U | Indicates the analyte was analyzed for but not detected. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| ▫ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Case Narrative

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

Job ID: 460-197430-1

Job ID: 460-197430-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP On-Site

Report Number: 460-197430-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 11/22/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.3° C and 4.7° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (460-197430-1), MW-196_112019 (460-197430-2), MW-196S_112019 (460-197430-3), MW-195S_112019 (460-197430-4), MW-194S_112019 (460-197430-5), MW-194_112019 (460-197430-6) and MW-198S_112019 (460-197430-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 11/27/2019.

Samples MW-196_112019 (460-197430-2)[2X] and MW-195S_112019 (460-197430-4)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-196_112019 (460-197430-2) and MW-195S_112019 (460-197430-4). Elevated reporting limits (RLs) are provided.

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

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples MW-196_112019 (460-197430-2), MW-196S_112019 (460-197430-3), MW-195S_112019 (460-197430-4), MW-194S_112019

Case Narrative

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

Job ID: 460-197430-1

Job ID: 460-197430-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

(460-197430-5), MW-194_112019 (460-197430-6) and MW-198S_112019 (460-197430-7) were analyzed for Volatile organic compounds (GC/MS) in accordance with SW-846 Method 8260C SIM. The samples were analyzed on 11/25/2019.

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

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Detection Summary

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

Job ID: 460-197430-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 460-197430-1

No Detections.

Client Sample ID: MW-196_112019

Lab Sample ID: 460-197430-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| 1,1-Dichloroethene | 0.73 | J | 2.0 | 0.53 | ug/L | 2 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 210 | | 2.0 | 0.44 | ug/L | 2 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 55 | | 2.0 | 0.47 | ug/L | 2 | | 8260C | Total/NA |
| Trichloroethene | 490 | | 2.0 | 0.63 | ug/L | 2 | | 8260C | Total/NA |

Client Sample ID: MW-196S_112019

Lab Sample ID: 460-197430-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 68 | | 1.0 | 0.22 | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 1.7 | | 1.0 | 0.24 | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 78 | | 1.0 | 0.31 | ug/L | 1 | | 8260C | Total/NA |

Client Sample ID: MW-195S_112019

Lab Sample ID: 460-197430-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------------|--------|-----------|----|-----|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 120 | | 10 | 2.2 | ug/L | 10 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 150 | | 10 | 2.4 | ug/L | 10 | | 8260C | Total/NA |
| Trichloroethene | 3400 | | 10 | 3.1 | ug/L | 10 | | 8260C | Total/NA |
| Vinyl chloride | 16 | | 10 | 1.7 | ug/L | 10 | | 8260C | Total/NA |

Client Sample ID: MW-194S_112019

Lab Sample ID: 460-197430-5

No Detections.

Client Sample ID: MW-194_112019

Lab Sample ID: 460-197430-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-------------|--------|-----------|-----|------|------|---------|---|-----------|-----------|
| 1,4-Dioxane | 1.5 | J | 2.0 | 0.33 | ug/L | 1 | | 8260C SIM | Total/NA |

Client Sample ID: MW-198S_112019

Lab Sample ID: 460-197430-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Trichloroethene | 0.43 | J | 1.0 | 0.31 | ug/L | 1 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

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

Job ID: 460-197430-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 460-197430-1

Date Collected: 11/20/19 00:00

Matrix: Water

Date Received: 11/22/19 10:15

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | - | | 11/27/19 04:12 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.22 | ug/L | - | | 11/27/19 04:12 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | - | | 11/27/19 04:12 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | - | | 11/27/19 04:12 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.31 | ug/L | - | | 11/27/19 04:12 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | - | | 11/27/19 04:12 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 74 - 132 | | 11/27/19 04:12 | 1 |
| Toluene-d8 (Surr) | 98 | | 80 - 120 | | 11/27/19 04:12 | 1 |
| Dibromofluoromethane (Surr) | 102 | | 72 - 131 | | 11/27/19 04:12 | 1 |
| 4-Bromofluorobenzene | 101 | | 77 - 124 | | 11/27/19 04:12 | 1 |

Client Sample ID: MW-196_112019

Lab Sample ID: 460-197430-2

Date Collected: 11/20/19 09:55

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | - | | 11/25/19 17:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 95 | | 72 - 133 | | 11/25/19 17:13 | 1 |

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 0.73 | J | 2.0 | 0.53 | ug/L | - | | 11/27/19 09:30 | 2 |
| cis-1,2-Dichloroethene | 210 | | 2.0 | 0.44 | ug/L | - | | 11/27/19 09:30 | 2 |
| Tetrachloroethene | 2.0 | U | 2.0 | 0.50 | ug/L | - | | 11/27/19 09:30 | 2 |
| trans-1,2-Dichloroethene | 55 | | 2.0 | 0.47 | ug/L | - | | 11/27/19 09:30 | 2 |
| Trichloroethene | 490 | | 2.0 | 0.63 | ug/L | - | | 11/27/19 09:30 | 2 |
| Vinyl chloride | 2.0 | U | 2.0 | 0.34 | ug/L | - | | 11/27/19 09:30 | 2 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 74 - 132 | | 11/27/19 09:30 | 2 |
| Toluene-d8 (Surr) | 99 | | 80 - 120 | | 11/27/19 09:30 | 2 |
| Dibromofluoromethane (Surr) | 103 | | 72 - 131 | | 11/27/19 09:30 | 2 |
| 4-Bromofluorobenzene | 104 | | 77 - 124 | | 11/27/19 09:30 | 2 |

Client Sample ID: MW-196S_112019

Lab Sample ID: 460-197430-3

Date Collected: 11/20/19 10:50

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | - | | 11/25/19 17:37 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 90 | | 72 - 133 | | 11/25/19 17:37 | 1 |

Client Sample Results

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

Job ID: 460-197430-1

Client Sample ID: MW-196S_112019

Lab Sample ID: 460-197430-3

Date Collected: 11/20/19 10:50

Matrix: Water

Date Received: 11/22/19 10:15

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | | | 11/27/19 09:03 | 1 |
| cis-1,2-Dichloroethene | 68 | | 1.0 | 0.22 | ug/L | | | 11/27/19 09:03 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | | | 11/27/19 09:03 | 1 |
| trans-1,2-Dichloroethene | 1.7 | | 1.0 | 0.24 | ug/L | | | 11/27/19 09:03 | 1 |
| Trichloroethene | 78 | | 1.0 | 0.31 | ug/L | | | 11/27/19 09:03 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | | | 11/27/19 09:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 74 - 132 | | 11/27/19 09:03 | 1 |
| Toluene-d8 (Surr) | 97 | | 80 - 120 | | 11/27/19 09:03 | 1 |
| Dibromofluoromethane (Surr) | 100 | | 72 - 131 | | 11/27/19 09:03 | 1 |
| 4-Bromofluorobenzene | 100 | | 77 - 124 | | 11/27/19 09:03 | 1 |

Client Sample ID: MW-195S_112019

Lab Sample ID: 460-197430-4

Date Collected: 11/20/19 11:45

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | | | 11/25/19 18:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 94 | | 72 - 133 | | 11/25/19 18:00 | 1 |

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|-------------|-----------|----|-----|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 10 | U | 10 | 2.6 | ug/L | | | 11/27/19 09:56 | 10 |
| cis-1,2-Dichloroethene | 120 | | 10 | 2.2 | ug/L | | | 11/27/19 09:56 | 10 |
| Tetrachloroethene | 10 | U | 10 | 2.5 | ug/L | | | 11/27/19 09:56 | 10 |
| trans-1,2-Dichloroethene | 150 | | 10 | 2.4 | ug/L | | | 11/27/19 09:56 | 10 |
| Trichloroethene | 3400 | | 10 | 3.1 | ug/L | | | 11/27/19 09:56 | 10 |
| Vinyl chloride | 16 | | 10 | 1.7 | ug/L | | | 11/27/19 09:56 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 74 - 132 | | 11/27/19 09:56 | 10 |
| Toluene-d8 (Surr) | 98 | | 80 - 120 | | 11/27/19 09:56 | 10 |
| Dibromofluoromethane (Surr) | 102 | | 72 - 131 | | 11/27/19 09:56 | 10 |
| 4-Bromofluorobenzene | 104 | | 77 - 124 | | 11/27/19 09:56 | 10 |

Client Sample ID: MW-194S_112019

Lab Sample ID: 460-197430-5

Date Collected: 11/20/19 13:00

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | | | 11/25/19 18:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 93 | | 72 - 133 | | 11/25/19 18:46 | 1 |

Client Sample Results

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

Job ID: 460-197430-1

Client Sample ID: MW-194S_112019

Lab Sample ID: 460-197430-5

Date Collected: 11/20/19 13:00

Matrix: Water

Date Received: 11/22/19 10:15

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | | | 11/27/19 07:44 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.22 | ug/L | | | 11/27/19 07:44 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | | | 11/27/19 07:44 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 11/27/19 07:44 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.31 | ug/L | | | 11/27/19 07:44 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | | | 11/27/19 07:44 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 74 - 132 | | 11/27/19 07:44 | 1 |
| Toluene-d8 (Surr) | 98 | | 80 - 120 | | 11/27/19 07:44 | 1 |
| Dibromofluoromethane (Surr) | 101 | | 72 - 131 | | 11/27/19 07:44 | 1 |
| 4-Bromofluorobenzene | 103 | | 77 - 124 | | 11/27/19 07:44 | 1 |

Client Sample ID: MW-194_112019

Lab Sample ID: 460-197430-6

Date Collected: 11/20/19 13:55

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 1.5 | J | 2.0 | 0.33 | ug/L | | | 11/25/19 18:23 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 95 | | 72 - 133 | | 11/25/19 18:23 | 1 |

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | | | 11/27/19 08:10 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.22 | ug/L | | | 11/27/19 08:10 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | | | 11/27/19 08:10 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 11/27/19 08:10 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.31 | ug/L | | | 11/27/19 08:10 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | | | 11/27/19 08:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 74 - 132 | | 11/27/19 08:10 | 1 |
| Toluene-d8 (Surr) | 97 | | 80 - 120 | | 11/27/19 08:10 | 1 |
| Dibromofluoromethane (Surr) | 101 | | 72 - 131 | | 11/27/19 08:10 | 1 |
| 4-Bromofluorobenzene | 103 | | 77 - 124 | | 11/27/19 08:10 | 1 |

Client Sample ID: MW-198S_112019

Lab Sample ID: 460-197430-7

Date Collected: 11/20/19 15:15

Matrix: Water

Date Received: 11/22/19 10:15

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | | | 11/25/19 19:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene | 92 | | 72 - 133 | | 11/25/19 19:10 | 1 |

Client Sample Results

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

Job ID: 460-197430-1

Client Sample ID: MW-198S_112019

Lab Sample ID: 460-197430-7

Date Collected: 11/20/19 15:15

Matrix: Water

Date Received: 11/22/19 10:15

Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | | | 11/27/19 08:37 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.22 | ug/L | | | 11/27/19 08:37 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | | | 11/27/19 08:37 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 11/27/19 08:37 | 1 |
| Trichloroethene | 0.43 | J | 1.0 | 0.31 | ug/L | | | 11/27/19 08:37 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | | | 11/27/19 08:37 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 74 - 132 | | 11/27/19 08:37 | 1 |
| Toluene-d8 (Surr) | 97 | | 80 - 120 | | 11/27/19 08:37 | 1 |
| Dibromofluoromethane (Surr) | 102 | | 72 - 131 | | 11/27/19 08:37 | 1 |
| 4-Bromofluorobenzene | 102 | | 77 - 124 | | 11/27/19 08:37 | 1 |

Surrogate Summary

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

Job ID: 460-197430-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCA (74-132) | TOL (80-120) | DBFM (72-131) | BFB (77-124) |
|-------------------|------------------------|-----------------|-----------------|------------------|-----------------|
| 460-197430-1 | TRIP BLANK | 96 | 98 | 102 | 101 |
| 460-197430-2 | MW-196_112019 | 95 | 99 | 103 | 104 |
| 460-197430-3 | MW-196S_112019 | 94 | 97 | 100 | 100 |
| 460-197430-4 | MW-195S_112019 | 94 | 98 | 102 | 104 |
| 460-197430-5 | MW-194S_112019 | 95 | 98 | 101 | 103 |
| 460-197430-6 | MW-194_112019 | 95 | 97 | 101 | 103 |
| 460-197430-7 | MW-198S_112019 | 96 | 97 | 102 | 102 |
| LCS 460-658572/3 | Lab Control Sample | 93 | 99 | 98 | 103 |
| LCSD 460-658572/4 | Lab Control Sample Dup | 99 | 99 | 100 | 104 |
| MB 460-658572/8 | Method Blank | 96 | 99 | 101 | 101 |

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB (72-133) |
|-------------------|------------------------|-----------------|
| 460-197430-2 | MW-196_112019 | 95 |
| 460-197430-3 | MW-196S_112019 | 90 |
| 460-197430-4 | MW-195S_112019 | 94 |
| 460-197430-5 | MW-194S_112019 | 93 |
| 460-197430-6 | MW-194_112019 | 95 |
| 460-197430-7 | MW-198S_112019 | 92 |
| LCS 460-658046/3 | Lab Control Sample | 99 |
| LCSD 460-658046/4 | Lab Control Sample Dup | 99 |
| MB 460-658046/8 | Method Blank | 94 |

Surrogate Legend

BFB = 4-Bromofluorobenzene

QC Sample Results

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

Job ID: 460-197430-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-658572/8
Matrix: Water
Analysis Batch: 658572

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

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.26 | ug/L | | | 11/27/19 01:49 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.22 | ug/L | | | 11/27/19 01:49 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.25 | ug/L | | | 11/27/19 01:49 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 11/27/19 01:49 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.31 | ug/L | | | 11/27/19 01:49 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.17 | ug/L | | | 11/27/19 01:49 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 74 - 132 | | 11/27/19 01:49 | 1 |
| Toluene-d8 (Surr) | 99 | | 80 - 120 | | 11/27/19 01:49 | 1 |
| Dibromofluoromethane (Surr) | 101 | | 72 - 131 | | 11/27/19 01:49 | 1 |
| 4-Bromofluorobenzene | 101 | | 77 - 124 | | 11/27/19 01:49 | 1 |

Lab Sample ID: LCS 460-658572/3
Matrix: Water
Analysis Batch: 658572

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

| Analyte | Spike Added | LCS | LCS | Unit | D | %Rec | %Rec. Limits |
|--------------------------|-------------|--------|-----------|------|---|------|--------------|
| | | Result | Qualifier | | | | |
| 1,1-Dichloroethene | 20.0 | 20.8 | | ug/L | | 104 | 74 - 123 |
| cis-1,2-Dichloroethene | 20.0 | 21.1 | | ug/L | | 105 | 80 - 120 |
| Tetrachloroethene | 20.0 | 21.3 | | ug/L | | 107 | 78 - 122 |
| trans-1,2-Dichloroethene | 20.0 | 21.3 | | ug/L | | 107 | 79 - 120 |
| Trichloroethene | 20.0 | 21.9 | | ug/L | | 110 | 77 - 120 |
| Vinyl chloride | 20.0 | 19.7 | | ug/L | | 98 | 62 - 138 |

| Surrogate | LCS | LCS | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 93 | | 74 - 132 |
| Toluene-d8 (Surr) | 99 | | 80 - 120 |
| Dibromofluoromethane (Surr) | 98 | | 72 - 131 |
| 4-Bromofluorobenzene | 103 | | 77 - 124 |

Lab Sample ID: LCSD 460-658572/4
Matrix: Water
Analysis Batch: 658572

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

| Analyte | Spike Added | LCSD | LCSD | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------|-------------|--------|-----------|------|---|------|--------------|-----|-----------|
| | | Result | Qualifier | | | | | | |
| 1,1-Dichloroethene | 20.0 | 18.9 | | ug/L | | 94 | 74 - 123 | 9 | 30 |
| cis-1,2-Dichloroethene | 20.0 | 20.0 | | ug/L | | 100 | 80 - 120 | 5 | 30 |
| Tetrachloroethene | 20.0 | 19.3 | | ug/L | | 97 | 78 - 122 | 10 | 30 |
| trans-1,2-Dichloroethene | 20.0 | 19.6 | | ug/L | | 98 | 79 - 120 | 8 | 30 |
| Trichloroethene | 20.0 | 20.1 | | ug/L | | 101 | 77 - 120 | 9 | 30 |
| Vinyl chloride | 20.0 | 17.7 | | ug/L | | 89 | 62 - 138 | 10 | 30 |

| Surrogate | LCSD | LCSD | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 74 - 132 |
| Toluene-d8 (Surr) | 99 | | 80 - 120 |
| Dibromofluoromethane (Surr) | 100 | | 72 - 131 |

QC Sample Results

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

Job ID: 460-197430-1

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

Lab Sample ID: LCSD 460-658572/4
Matrix: Water
Analysis Batch: 658572

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

| Surrogate | LCSD LCSD | | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene | 104 | | 77 - 124 |

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

Lab Sample ID: MB 460-658046/8
Matrix: Water
Analysis Batch: 658046

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0 | U | 2.0 | 0.33 | ug/L | | | 11/25/19 11:20 | 1 |

| Surrogate | MB MB | | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 4-Bromofluorobenzene | 94 | | 72 - 133 | | 11/25/19 11:20 | 1 |

Lab Sample ID: LCS 460-658046/3
Matrix: Water
Analysis Batch: 658046

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------|-------------|------------|---------------|------|---|------|--------------|
| 1,4-Dioxane | 5.00 | 4.32 | | ug/L | | 86 | 66 - 135 |

| Surrogate | LCS LCS | | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene | 99 | | 72 - 133 |

Lab Sample ID: LCSD 460-658046/4
Matrix: Water
Analysis Batch: 658046

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

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| 1,4-Dioxane | 5.00 | 5.18 | | ug/L | | 104 | 66 - 135 | 18 | 30 |

| Surrogate | LCSD LCSD | | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene | 99 | | 72 - 133 |

QC Association Summary

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

Job ID: 460-197430-1

GC/MS VOA

Analysis Batch: 658046

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-----------|------------|
| 460-197430-2 | MW-196_112019 | Total/NA | Water | 8260C SIM | |
| 460-197430-3 | MW-196S_112019 | Total/NA | Water | 8260C SIM | |
| 460-197430-4 | MW-195S_112019 | Total/NA | Water | 8260C SIM | |
| 460-197430-5 | MW-194S_112019 | Total/NA | Water | 8260C SIM | |
| 460-197430-6 | MW-194_112019 | Total/NA | Water | 8260C SIM | |
| 460-197430-7 | MW-198S_112019 | Total/NA | Water | 8260C SIM | |
| MB 460-658046/8 | Method Blank | Total/NA | Water | 8260C SIM | |
| LCS 460-658046/3 | Lab Control Sample | Total/NA | Water | 8260C SIM | |
| LCSD 460-658046/4 | Lab Control Sample Dup | Total/NA | Water | 8260C SIM | |

Analysis Batch: 658572

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 460-197430-1 | TRIP BLANK | Total/NA | Water | 8260C | |
| 460-197430-2 | MW-196_112019 | Total/NA | Water | 8260C | |
| 460-197430-3 | MW-196S_112019 | Total/NA | Water | 8260C | |
| 460-197430-4 | MW-195S_112019 | Total/NA | Water | 8260C | |
| 460-197430-5 | MW-194S_112019 | Total/NA | Water | 8260C | |
| 460-197430-6 | MW-194_112019 | Total/NA | Water | 8260C | |
| 460-197430-7 | MW-198S_112019 | Total/NA | Water | 8260C | |
| MB 460-658572/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 460-658572/3 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 460-658572/4 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

Lab Chronicle

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

Job ID: 460-197430-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 460-197430-1

Date Collected: 11/20/19 00:00

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 1 | 658572 | 11/27/19 04:12 | MZS | TAL EDI |

Client Sample ID: MW-196_112019

Lab Sample ID: 460-197430-2

Date Collected: 11/20/19 09:55

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 2 | 658572 | 11/27/19 09:30 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 17:13 | SZD | TAL EDI |

Client Sample ID: MW-196S_112019

Lab Sample ID: 460-197430-3

Date Collected: 11/20/19 10:50

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 1 | 658572 | 11/27/19 09:03 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 17:37 | SZD | TAL EDI |

Client Sample ID: MW-195S_112019

Lab Sample ID: 460-197430-4

Date Collected: 11/20/19 11:45

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 10 | 658572 | 11/27/19 09:56 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 18:00 | SZD | TAL EDI |

Client Sample ID: MW-194S_112019

Lab Sample ID: 460-197430-5

Date Collected: 11/20/19 13:00

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 1 | 658572 | 11/27/19 07:44 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 18:46 | SZD | TAL EDI |

Client Sample ID: MW-194_112019

Lab Sample ID: 460-197430-6

Date Collected: 11/20/19 13:55

Matrix: Water

Date Received: 11/22/19 10:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260C | | 1 | 658572 | 11/27/19 08:10 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 18:23 | SZD | TAL EDI |

Lab Chronicle

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

Job ID: 460-197430-1

Client Sample ID: MW-198S_112019

Lab Sample ID: 460-197430-7

Date Collected: 11/20/19 15:15

Matrix: Water

Date Received: 11/22/19 10:15

| <u>Prep Type</u> | <u>Batch Type</u> | <u>Batch Method</u> | <u>Run</u> | <u>Dilution Factor</u> | <u>Batch Number</u> | <u>Prepared or Analyzed</u> | <u>Analyst</u> | <u>Lab</u> |
|------------------|-------------------|---------------------|------------|------------------------|---------------------|-----------------------------|----------------|------------|
| Total/NA | Analysis | 8260C | | 1 | 658572 | 11/27/19 08:37 | MZS | TAL EDI |
| Total/NA | Analysis | 8260C SIM | | 1 | 658046 | 11/25/19 19:10 | SZD | TAL EDI |

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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Accreditation/Certification Summary

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

Job ID: 460-197430-1

Laboratory: Eurofins TestAmerica, Edison

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

| Authority | Program | Identification Number | Expiration Date |
|-----------------------------------|---------------------|-----------------------|-----------------|
| Connecticut | State | PH-0200 | 09-30-20 |
| DE Haz. Subst. Cleanup Act (HSCA) | State | <cert No.> | 12-31-21 |
| Georgia | State | 12028 (NJ) | 06-30-20 |
| Massachusetts | State Program | M-NJ312 | 06-30-20 |
| New Jersey | NELAP | 12028 | 06-30-20 |
| New York | NELAP | 11452 | 04-01-20 |
| Pennsylvania | NELAP | 68-00522 | 02-28-20 |
| Rhode Island | State | LAO00132 | 12-30-19 |
| USDA | US Federal Programs | P330-18-00135 | 05-03-21 |

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 |
| Iowa | 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 |

Method Summary

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

Job ID: 460-197430-1

| Method | Method Description | Protocol | Laboratory |
|-----------|-------------------------------------|----------|------------|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL EDI |
| 8260C SIM | Volatile Organic Compounds (GC/MS) | SW846 | TAL EDI |
| 5030C | Purge and Trap | SW846 | TAL EDI |

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900



Sample Summary

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

Job ID: 460-197430-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 460-197430-1 | TRIP BLANK | Water | 11/20/19 00:00 | 11/22/19 10:15 | |
| 460-197430-2 | MW-196_112019 | Water | 11/20/19 09:55 | 11/22/19 10:15 | |
| 460-197430-3 | MW-196S_112019 | Water | 11/20/19 10:50 | 11/22/19 10:15 | |
| 460-197430-4 | MW-195S_112019 | Water | 11/20/19 11:45 | 11/22/19 10:15 | |
| 460-197430-5 | MW-194S_112019 | Water | 11/20/19 13:00 | 11/22/19 10:15 | |
| 460-197430-6 | MW-194_112019 | Water | 11/20/19 13:55 | 11/22/19 10:15 | |
| 460-197430-7 | MW-198S_112019 | Water | 11/20/19 15:15 | 11/22/19 10:15 | |

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

197430

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact
 Company Name: Arcadis
 Address: 28550 Cabot Drive, Suite 500
 City/State/Zip: Novi, MI, 48377
 Phone: 248-994-2240
 Project Name: Ford LTP On-Site
 Project Number: 30016346.0001B
 PO # 30016346.0001B

Regulatory program: DW NPDES RCRA Other

Client Project Manager: Kris Hinskey
 Telephone: 248-994-2240
 Email: kristoffer.hinskey@arcadis.com

Site Contact: Rachel Bielak
 Telephone: 248-946-6331

Lab Contact: Mike DelMonico
 Telephone: 330-497-9396

Company Name: Christina Weaver
 Method of Shipment/Carrier:
 Shipping/Tracking No:

Analysis:
 TAT if different from below
 10 day
 3 weeks
 2 weeks
 1 week
 2 days
 1 day

Sample Identification
 Sample Date Sample Time

| Sample Identification | Matrix | | | Contaminants & Parameters | | | | | | Other: | Sample Specific Notes / Special Instructions: | | |
|-----------------------|--------|---------|----------|---------------------------|-------|------|-----|------|-----------|--------|---|--------|---------------------|
| | Air | Aqueous | Sediment | Solid | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | | | Unpres | |
| TRIP BLANK | X | | | | | X | | | | | | | 1 TRIP BLANK |
| MW-196-112019 | X | X | | | | X | | | | | | | 3 VOLS METHOD 8260B |
| MW-196S-112019 | X | X | | | | X | | | | | | | 3 VOLS METHOD 8260B |
| MW-195S-112019 | X | X | | | | X | | | | | | | " " |
| MW-194S-112019 | X | X | | | | X | | | | | | | " " |
| MW-194-112019 | X | X | | | | X | | | | | | | " " |
| MW-198S-112019 | X | X | | | | X | | | | | | | " " |



Possible Hazard Identification
 Non-Hazard Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
 Submit all results through Cadena at jim.tomalia@cadena.com. Cadena #E203728
 Level IV Reporting requested.

Relinquished by: Christina Weaver
 Date/Time: 11/20/19 1735
 Company: Arcadis

Relinquished by: RACHEL BIELAK
 Date/Time: 11/21/19 1100
 Company: ARCADIS

Relinquished by: Jim Heald
 Date/Time: 11-21-19 1309
 Company: ETA

Received by: NOVI cold storage
 Date/Time: 11/20/19 1735
 Company: Arcadis

Received by: Jim Heald
 Date/Time: 11-21-19 1100
 Company: ETA

Received in Laboratory by: Jim Heald
 Date/Time: 11/21/19
 Company: TR

460-197430 Chain of Custody
 e retained longer than 1 month) Archive For _____ Months

4-4/4-7 40/4-3

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Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-197430-1

Login Number: 197430

List Number: 1

Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

| Question | Answer | Comment |
|---|--------|-------------------------------------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | False | Refer to Job Narrative for details. |
| Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |