

# ANALYTICAL REPORT

## PREPARED FOR

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Novi, Michigan 48377

Generated 3/13/2025 7:23:12 AM

## JOB DESCRIPTION

Ford LTP

## JOB NUMBER

240-219646-1

# Eurofins Cleveland

## Job Notes

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## Authorization



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## Definitions/Glossary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

### 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  |
| CFU            | Colony Forming Unit   |
| CNF            | Contains No Free Liquid   |
| DER            | Duplicate Error Ratio (normalized absolute difference)  |
| Dil Fac        | Dilution Factor   |
| DL             | Detection Limit (DoD/DOE)   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)   |
| EDL            | Estimated Detection Limit (Dioxin)  |
| LOD            | Limit of Detection (DoD/DOE)  |
| LOQ            | Limit of Quantitation (DoD/DOE)   |
| MCL            | EPA recommended "Maximum Contaminant Level"   |
| MDA            | Minimum Detectable Activity (Radiochemistry)  |
| MDC            | Minimum Detectable Concentration (Radiochemistry)   |
| MDL            | Method Detection Limit  |
| ML             | Minimum Level (Dioxin)  |
| MPN            | Most Probable Number  |
| MQL            | Method Quantitation Limit   |
| NC             | Not Calculated  |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)  |
| NEG            | Negative / Absent   |
| POS            | Positive / Present  |
| PQL            | Practical Quantitation Limit  |
| PRES           | Presumptive   |
| QC             | Quality Control   |
| RER            | Relative Error Ratio (Radiochemistry)   |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)   |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)   |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)   |
| TNTC           | Too Numerous To Count   |

## Case Narrative

Client: Arcadis US Inc.  
Project: Ford LTP

Job ID: 240-219646-1

**Job ID: 240-219646-1**

**Eurofins Cleveland**

### **Job Narrative 240-219646-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### **Receipt**

The samples were received on 2/28/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.6°C.

#### **GC/MS VOA**

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

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## Method Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

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

### Protocol References:

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

### Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

## Sample Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 240-219646-1  | TRIP BLANK_118   | Water  | 02/26/25 00:00 | 02/28/25 08:00 |
| 240-219646-2  | MW-208S_022625   | Water  | 02/26/25 08:37 | 02/28/25 08:00 |
| 240-219646-3  | MW-209S_022625   | Water  | 02/26/25 09:50 | 02/28/25 08:00 |
| 240-219646-4  | MW-210S_022625   | Water  | 02/26/25 10:50 | 02/28/25 08:00 |

## Detection Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

**Client Sample ID: TRIP BLANK\_118**

**Lab Sample ID: 240-219646-1**

No Detections.

**Client Sample ID: MW-208S\_022625**

**Lab Sample ID: 240-219646-2**

No Detections.

**Client Sample ID: MW-209S\_022625**

**Lab Sample ID: 240-219646-3**

| Analyte                | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 0.64   | J         | 1.0 | 0.46 | ug/L | 1       |   | 8260D  | Total/NA  |
| Vinyl chloride         | 3.0    |           | 1.0 | 0.45 | ug/L | 1       |   | 8260D  | Total/NA  |

**Client Sample ID: MW-210S\_022625**

**Lab Sample ID: 240-219646-4**

| Analyte                  | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method    | Prep Type |
|--------------------------|--------|-----------|-----|------|------|---------|---|-----------|-----------|
| 1,4-Dioxane              | 0.95   | J         | 2.0 | 0.86 | ug/L | 1       |   | 8260D SIM | Total/NA  |
| cis-1,2-Dichloroethene   | 21     |           | 1.0 | 0.46 | ug/L | 1       |   | 8260D     | Total/NA  |
| trans-1,2-Dichloroethene | 2.5    |           | 1.0 | 0.51 | ug/L | 1       |   | 8260D     | Total/NA  |
| Vinyl chloride           | 16     |           | 1.0 | 0.45 | ug/L | 1       |   | 8260D     | Total/NA  |

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

Client Sample ID: TRIP BLANK\_118

Lab Sample ID: 240-219646-1

Date Collected: 02/26/25 00:00

Matrix: Water

Date Received: 02/28/25 08:00

## Method: SW846 8260D - 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 | 0.49 | ug/L |   |          | 03/10/25 16:56 | 1       |
| cis-1,2-Dichloroethene   | 1.0    | U         | 1.0 | 0.46 | ug/L |   |          | 03/10/25 16:56 | 1       |
| Tetrachloroethene        | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 03/10/25 16:56 | 1       |
| trans-1,2-Dichloroethene | 1.0    | U         | 1.0 | 0.51 | ug/L |   |          | 03/10/25 16:56 | 1       |
| Trichloroethene          | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 03/10/25 16:56 | 1       |
| Vinyl chloride           | 1.0    | U         | 1.0 | 0.45 | ug/L |   |          | 03/10/25 16:56 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 114       |           | 62 - 137 |          | 03/10/25 16:56 | 1       |
| 4-Bromofluorobenzene (Surr)  | 82        |           | 56 - 136 |          | 03/10/25 16:56 | 1       |
| Toluene-d8 (Surr)            | 98        |           | 78 - 122 |          | 03/10/25 16:56 | 1       |
| Dibromofluoromethane (Surr)  | 118       |           | 73 - 120 |          | 03/10/25 16:56 | 1       |

# Client Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

Client Sample ID: MW-208S\_022625

Lab Sample ID: 240-219646-2

Date Collected: 02/26/25 08:37

Matrix: Water

Date Received: 02/28/25 08:00

## Method: SW846 8260D SIM - Volatile Organic Compounds (GC/MS)

| Analyte                      | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|------|------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 2.0       | U         | 2.0      | 0.86 | ug/L |   |          | 03/11/25 19:53 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 115       |           | 68 - 127 |      |      |   |          | 03/11/25 19:53 | 1       |

## Method: SW846 8260D - 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      | 0.49 | ug/L |   |          | 03/10/25 17:14 | 1       |
| cis-1,2-Dichloroethene       | 1.0       | U         | 1.0      | 0.46 | ug/L |   |          | 03/10/25 17:14 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:14 | 1       |
| trans-1,2-Dichloroethene     | 1.0       | U         | 1.0      | 0.51 | ug/L |   |          | 03/10/25 17:14 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:14 | 1       |
| Vinyl chloride               | 1.0       | U         | 1.0      | 0.45 | ug/L |   |          | 03/10/25 17:14 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 115       |           | 62 - 137 |      |      |   |          | 03/10/25 17:14 | 1       |
| 4-Bromofluorobenzene (Surr)  | 78        |           | 56 - 136 |      |      |   |          | 03/10/25 17:14 | 1       |
| Toluene-d8 (Surr)            | 99        |           | 78 - 122 |      |      |   |          | 03/10/25 17:14 | 1       |
| Dibromofluoromethane (Surr)  | 117       |           | 73 - 120 |      |      |   |          | 03/10/25 17:14 | 1       |

# Client Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

Client Sample ID: MW-209S\_022625

Lab Sample ID: 240-219646-3

Date Collected: 02/26/25 09:50

Matrix: Water

Date Received: 02/28/25 08:00

## Method: SW846 8260D SIM - Volatile Organic Compounds (GC/MS)

| Analyte                      | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|------|------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 2.0       | U         | 2.0      | 0.86 | ug/L |   |          | 03/11/25 23:24 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 118       |           | 68 - 127 |      |      |   |          | 03/11/25 23:24 | 1       |

## Method: SW846 8260D - 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      | 0.49 | ug/L |   |          | 03/10/25 17:32 | 1       |
| cis-1,2-Dichloroethene       | 0.64      | J         | 1.0      | 0.46 | ug/L |   |          | 03/10/25 17:32 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:32 | 1       |
| trans-1,2-Dichloroethene     | 1.0       | U         | 1.0      | 0.51 | ug/L |   |          | 03/10/25 17:32 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:32 | 1       |
| Vinyl chloride               | 3.0       |           | 1.0      | 0.45 | ug/L |   |          | 03/10/25 17:32 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 105       |           | 62 - 137 |      |      |   |          | 03/10/25 17:32 | 1       |
| 4-Bromofluorobenzene (Surr)  | 79        |           | 56 - 136 |      |      |   |          | 03/10/25 17:32 | 1       |
| Toluene-d8 (Surr)            | 94        |           | 78 - 122 |      |      |   |          | 03/10/25 17:32 | 1       |
| Dibromofluoromethane (Surr)  | 108       |           | 73 - 120 |      |      |   |          | 03/10/25 17:32 | 1       |

# Client Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

Client Sample ID: MW-210S\_022625

Lab Sample ID: 240-219646-4

Date Collected: 02/26/25 10:50

Matrix: Water

Date Received: 02/28/25 08:00

## Method: SW846 8260D SIM - Volatile Organic Compounds (GC/MS)

| Analyte                      | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|------|------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 0.95      | J         | 2.0      | 0.86 | ug/L |   |          | 03/11/25 13:14 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 110       |           | 68 - 127 |      |      |   |          | 03/11/25 13:14 | 1       |

## Method: SW846 8260D - 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      | 0.49 | ug/L |   |          | 03/10/25 17:50 | 1       |
| cis-1,2-Dichloroethene       | 21        |           | 1.0      | 0.46 | ug/L |   |          | 03/10/25 17:50 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:50 | 1       |
| trans-1,2-Dichloroethene     | 2.5       |           | 1.0      | 0.51 | ug/L |   |          | 03/10/25 17:50 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 03/10/25 17:50 | 1       |
| Vinyl chloride               | 16        |           | 1.0      | 0.45 | ug/L |   |          | 03/10/25 17:50 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 114       |           | 62 - 137 |      |      |   |          | 03/10/25 17:50 | 1       |
| 4-Bromofluorobenzene (Surr)  | 84        |           | 56 - 136 |      |      |   |          | 03/10/25 17:50 | 1       |
| Toluene-d8 (Surr)            | 104       |           | 78 - 122 |      |      |   |          | 03/10/25 17:50 | 1       |
| Dibromofluoromethane (Surr)  | 116       |           | 73 - 120 |      |      |   |          | 03/10/25 17:50 | 1       |

# Surrogate Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

|                                    |                    | Percent Surrogate Recovery (Acceptance Limits) |          |          |          |
|------------------------------------|--------------------|--|----------|----------|----------|
| Lab Sample ID                      | Client Sample ID   | DCA  | BFB      | TOL      | DBFM     |
|                                    |                    | (62-137)                                       | (56-136) | (78-122) | (73-120) |
| 240-219646-1                       | TRIP BLANK_118     | 114  | 82       | 98       | 118      |
| 240-219646-2                       | MW-208S_022625     | 115  | 78       | 99       | 117      |
| 240-219646-2 MS                    | MW-208S-MS_022625  | 88   | 100      | 91       | 92       |
| 240-219646-2 MSD                   | MW-208S-MSD_022625 | 90   | 104      | 94       | 97       |
| 240-219646-3                       | MW-209S_022625     | 105  | 79       | 94       | 108      |
| 240-219646-4                       | MW-210S_022625     | 114  | 84       | 104      | 116      |
| LCS 240-647469/4                   | Lab Control Sample | 88   | 105      | 103      | 97       |
| MB 240-647469/7                    | Method Blank       | 97   | 84       | 89       | 96       |
| <b>Surrogate Legend</b>            |                    |  |          |          |          |
| DCA = 1,2-Dichloroethane-d4 (Surr) |                    |  |          |          |          |
| BFB = 4-Bromofluorobenzene (Surr)  |                    |  |          |          |          |
| TOL = Toluene-d8 (Surr)            |                    |  |          |          |          |
| DBFM = Dibromofluoromethane (Surr) |                    |  |          |          |          |

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

Matrix: Water

Prep Type: Total/NA

|                                    |                        | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |  |  |
|------------------------------------|------------------------|--|--|--|--|--|--|
| Lab Sample ID                      | Client Sample ID       | DCA  |  |  |  |  |  |
|                                    |                        | (68-127)                                       |  |  |  |  |  |
| 240-219646-2                       | MW-208S_022625         | 115  |  |  |  |  |  |
| 240-219646-2 MS                    | MW-208S-MS_022625      | 118  |  |  |  |  |  |
| 240-219646-2 MSD                   | MW-208S-MSD_022625     | 114  |  |  |  |  |  |
| 240-219646-3                       | MW-209S_022625         | 118  |  |  |  |  |  |
| 240-219646-4                       | MW-210S_022625         | 110  |  |  |  |  |  |
| 240-219861-B-3 MS                  | Matrix Spike           | 120  |  |  |  |  |  |
| 240-219861-B-3 MSD                 | Matrix Spike Duplicate | 121  |  |  |  |  |  |
| LCS 240-647648/5                   | Lab Control Sample     | 105  |  |  |  |  |  |
| LCS 240-647793/3                   | Lab Control Sample     | 116  |  |  |  |  |  |
| MB 240-647648/7                    | Method Blank           | 108  |  |  |  |  |  |
| MB 240-647793/5                    | Method Blank           | 123  |  |  |  |  |  |
| <b>Surrogate Legend</b>            |                        |  |  |  |  |  |  |
| DCA = 1,2-Dichloroethane-d4 (Surr) |                        |  |  |  |  |  |  |

# QC Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-647469/7

Matrix: Water

Analysis Batch: 647469

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                  | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene       | 1.0       | U            | 1.0 | 0.49 | ug/L |   |          | 03/10/25 12:56 | 1       |
| cis-1,2-Dichloroethene   | 1.0       | U            | 1.0 | 0.46 | ug/L |   |          | 03/10/25 12:56 | 1       |
| Tetrachloroethene        | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 03/10/25 12:56 | 1       |
| trans-1,2-Dichloroethene | 1.0       | U            | 1.0 | 0.51 | ug/L |   |          | 03/10/25 12:56 | 1       |
| Trichloroethene          | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 03/10/25 12:56 | 1       |
| Vinyl chloride           | 1.0       | U            | 1.0 | 0.45 | ug/L |   |          | 03/10/25 12:56 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 97           |              | 62 - 137 |          | 03/10/25 12:56 | 1       |
| 4-Bromofluorobenzene (Surr)  | 84           |              | 56 - 136 |          | 03/10/25 12:56 | 1       |
| Toluene-d8 (Surr)            | 89           |              | 78 - 122 |          | 03/10/25 12:56 | 1       |
| Dibromofluoromethane (Surr)  | 96           |              | 73 - 120 |          | 03/10/25 12:56 | 1       |

Lab Sample ID: LCS 240-647469/4

Matrix: Water

Analysis Batch: 647469

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 25.0        | 28.6       |               | ug/L |   | 114  | 63 - 134    |
| cis-1,2-Dichloroethene   | 25.0        | 27.2       |               | ug/L |   | 109  | 77 - 123    |
| Tetrachloroethene        | 25.0        | 21.7       |               | ug/L |   | 87   | 76 - 123    |
| trans-1,2-Dichloroethene | 25.0        | 27.9       |               | ug/L |   | 111  | 75 - 124    |
| Trichloroethene          | 25.0        | 25.9       |               | ug/L |   | 104  | 70 - 122    |
| Vinyl chloride           | 12.5        | 15.0       |               | ug/L |   | 120  | 60 - 144    |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 88            |               | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 105           |               | 56 - 136 |
| Toluene-d8 (Surr)            | 103           |               | 78 - 122 |
| Dibromofluoromethane (Surr)  | 97            |               | 73 - 120 |

Lab Sample ID: 240-219646-2 MS

Matrix: Water

Analysis Batch: 647469

Client Sample ID: MW-208S-MS\_022625

Prep Type: Total/NA

| Analyte                  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 1.0           | U                | 25.0        | 27.5      |              | ug/L |   | 110  | 56 - 135    |
| cis-1,2-Dichloroethene   | 1.0           | U                | 25.0        | 26.3      |              | ug/L |   | 105  | 66 - 128    |
| Tetrachloroethene        | 1.0           | U                | 25.0        | 18.5      |              | ug/L |   | 74   | 62 - 131    |
| trans-1,2-Dichloroethene | 1.0           | U                | 25.0        | 27.4      |              | ug/L |   | 110  | 56 - 136    |
| Trichloroethene          | 1.0           | U                | 25.0        | 25.6      |              | ug/L |   | 102  | 61 - 124    |
| Vinyl chloride           | 1.0           | U                | 12.5        | 14.4      |              | ug/L |   | 115  | 43 - 157    |

| Surrogate                    | MS %Recovery | MS Qualifier | Limits   |
|------------------------------|--------------|--------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 88           |              | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 100          |              | 56 - 136 |
| Toluene-d8 (Surr)            | 91           |              | 78 - 122 |

Eurofins Cleveland

# QC Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

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

Lab Sample ID: 240-219646-2 MS

Matrix: Water

Analysis Batch: 647469

Client Sample ID: MW-208S-MS\_022625

Prep Type: Total/NA

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| Dibromofluoromethane (Surr) | 92        |           | 73 - 120 |

Lab Sample ID: 240-219646-2 MSD

Matrix: Water

Analysis Batch: 647469

Client Sample ID: MW-208S-MSD\_022625

Prep Type: Total/NA

| Analyte                  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| 1,1-Dichloroethene       | 1.0           | U                | 25.0        | 30.4       |               | ug/L |   | 122  | 56 - 135    | 10  | 26        |
| cis-1,2-Dichloroethene   | 1.0           | U                | 25.0        | 27.9       |               | ug/L |   | 112  | 66 - 128    | 6   | 14        |
| Tetrachloroethene        | 1.0           | U                | 25.0        | 20.9       |               | ug/L |   | 84   | 62 - 131    | 12  | 20        |
| trans-1,2-Dichloroethene | 1.0           | U                | 25.0        | 29.1       |               | ug/L |   | 116  | 56 - 136    | 6   | 15        |
| Trichloroethene          | 1.0           | U                | 25.0        | 27.9       |               | ug/L |   | 112  | 61 - 124    | 9   | 15        |
| Vinyl chloride           | 1.0           | U                | 12.5        | 15.7       |               | ug/L |   | 126  | 43 - 157    | 9   | 24        |

|                              | MSD       | MSD       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 90        |           | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 104       |           | 56 - 136 |
| Toluene-d8 (Surr)            | 94        |           | 78 - 122 |
| Dibromofluoromethane (Surr)  | 97        |           | 73 - 120 |

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

Lab Sample ID: MB 240-647648/7

Matrix: Water

Analysis Batch: 647648

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte     | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0       | U            | 2.0 | 0.86 | ug/L |   |          | 03/11/25 10:53 | 1       |

|                              | MB        | MB        |          |          |                |         |  |  |  |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|--|--|--|
| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |  |  |  |
| 1,2-Dichloroethane-d4 (Surr) | 108       |           | 68 - 127 |          | 03/11/25 10:53 | 1       |  |  |  |

Lab Sample ID: LCS 240-647648/5

Matrix: Water

Analysis Batch: 647648

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------|-------------|------------|---------------|------|---|------|-------------|
| 1,4-Dioxane | 10.0        | 9.14       |               | ug/L |   | 91   | 75 - 121    |

|                              | LCS       | LCS       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 105       |           | 68 - 127 |

Lab Sample ID: 240-219646-2 MS

Matrix: Water

Analysis Batch: 647648

Client Sample ID: MW-208S-MS\_022625

Prep Type: Total/NA

| Analyte     | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| 1,4-Dioxane | 2.0           | U                | 10.0        | 10.3      |              | ug/L |   | 103  | 20 - 180    |

Eurofins Cleveland

# QC Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

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

|                              | MS        | MS        |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 118       |           | 68 - 127 |

Lab Sample ID: 240-219646-2 MSD  
Matrix: Water  
Analysis Batch: 647648

Client Sample ID: MW-208S-MSD\_022625  
Prep Type: Total/NA

| Analyte     | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| 1,4-Dioxane | 2.0           | U                | 10.0        | 10.1       |               | ug/L |   | 101  | 20 - 180    | 1   | 20        |

|                              | MSD       | MSD       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 114       |           | 68 - 127 |

Lab Sample ID: MB 240-647793/5  
Matrix: Water  
Analysis Batch: 647793

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

| Analyte     | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dioxane | 2.0       | U            | 2.0 | 0.86 | ug/L |   |          | 03/11/25 23:00 | 1       |

|                              | MB        | MB        |          |          |                |         |  |  |  |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|--|--|--|
| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |  |  |  |
| 1,2-Dichloroethane-d4 (Surr) | 123       |           | 68 - 127 |          | 03/11/25 23:00 | 1       |  |  |  |

Lab Sample ID: LCS 240-647793/3  
Matrix: Water  
Analysis Batch: 647793

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

| Analyte     |  |  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |  |  |
|-------------|--|--|-------------|------------|---------------|------|---|------|-------------|--|--|
| 1,4-Dioxane |  |  | 10.0        | 9.35       |               | ug/L |   | 93   | 75 - 121    |  |  |

|                              | LCS       | LCS       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 116       |           | 68 - 127 |

Lab Sample ID: 240-219861-B-3 MS  
Matrix: Water  
Analysis Batch: 647793

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

| Analyte     | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |  |  |
|-------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|--|--|
| 1,4-Dioxane | 2.0           | U                | 10.0        | 10.3      |              | ug/L |   | 103  | 20 - 180    |  |  |

|                              | MS        | MS        |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 120       |           | 68 - 127 |

Lab Sample ID: 240-219861-B-3 MSD  
Matrix: Water  
Analysis Batch: 647793

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

| Analyte     | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| 1,4-Dioxane | 2.0           | U                | 10.0        | 9.94       |               | ug/L |   | 99   | 20 - 180    | 4   | 20        |

Eurofins Cleveland



QC Sample Results

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

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

Lab Sample ID: 240-219861-B-3 MSD  
Matrix: Water  
Analysis Batch: 647793

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

|                              | MSD       | MSD       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 121       |           | 68 - 127 |

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

# QC Association Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

## GC/MS VOA

### Analysis Batch: 647469

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 240-219646-1     | TRIP BLANK_118     | Total/NA  | Water  | 8260D  |            |
| 240-219646-2     | MW-208S_022625     | Total/NA  | Water  | 8260D  |            |
| 240-219646-3     | MW-209S_022625     | Total/NA  | Water  | 8260D  |            |
| 240-219646-4     | MW-210S_022625     | Total/NA  | Water  | 8260D  |            |
| MB 240-647469/7  | Method Blank       | Total/NA  | Water  | 8260D  |            |
| LCS 240-647469/4 | Lab Control Sample | Total/NA  | Water  | 8260D  |            |
| 240-219646-2 MS  | MW-208S-MS_022625  | Total/NA  | Water  | 8260D  |            |
| 240-219646-2 MSD | MW-208S-MSD_022625 | Total/NA  | Water  | 8260D  |            |

### Analysis Batch: 647648

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method    | Prep Batch |
|------------------|--------------------|-----------|--------|-----------|------------|
| 240-219646-2     | MW-208S_022625     | Total/NA  | Water  | 8260D SIM |            |
| 240-219646-4     | MW-210S_022625     | Total/NA  | Water  | 8260D SIM |            |
| MB 240-647648/7  | Method Blank       | Total/NA  | Water  | 8260D SIM |            |
| LCS 240-647648/5 | Lab Control Sample | Total/NA  | Water  | 8260D SIM |            |
| 240-219646-2 MS  | MW-208S-MS_022625  | Total/NA  | Water  | 8260D SIM |            |
| 240-219646-2 MSD | MW-208S-MSD_022625 | Total/NA  | Water  | 8260D SIM |            |

### Analysis Batch: 647793

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method    | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 240-219646-3       | MW-209S_022625         | Total/NA  | Water  | 8260D SIM |            |
| MB 240-647793/5    | Method Blank           | Total/NA  | Water  | 8260D SIM |            |
| LCS 240-647793/3   | Lab Control Sample     | Total/NA  | Water  | 8260D SIM |            |
| 240-219861-B-3 MS  | Matrix Spike           | Total/NA  | Water  | 8260D SIM |            |
| 240-219861-B-3 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260D SIM |            |

# Lab Chronicle

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1

**Client Sample ID: TRIP BLANK\_118**

**Lab Sample ID: 240-219646-1**

Date Collected: 02/26/25 00:00

Matrix: Water

Date Received: 02/28/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 647469       | LEE     | EET CLE | 03/10/25 16:56       |

**Client Sample ID: MW-208S\_022625**

**Lab Sample ID: 240-219646-2**

Date Collected: 02/26/25 08:37

Matrix: Water

Date Received: 02/28/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 647469       | LEE     | EET CLE | 03/10/25 17:14       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 647648       | R5XG    | EET CLE | 03/11/25 19:53       |

**Client Sample ID: MW-209S\_022625**

**Lab Sample ID: 240-219646-3**

Date Collected: 02/26/25 09:50

Matrix: Water

Date Received: 02/28/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 647469       | LEE     | EET CLE | 03/10/25 17:32       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 647793       | R5XG    | EET CLE | 03/11/25 23:24       |

**Client Sample ID: MW-210S\_022625**

**Lab Sample ID: 240-219646-4**

Date Collected: 02/26/25 10:50

Matrix: Water

Date Received: 02/28/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 647469       | LEE     | EET CLE | 03/10/25 17:50       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 647648       | R5XG    | EET CLE | 03/11/25 13:14       |

## Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

## Accreditation/Certification Summary

Client: Arcadis US Inc.  
Project/Site: Ford LTP

Job ID: 240-219646-1


### Laboratory: Eurofins Cleveland

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-0806               | 12-31-26        |
| Georgia           | State               | 4062                  | 02-27-26        |
| Illinois          | NELAP               | 200004                | 08-31-25        |
| Iowa              | State               | 421                   | 06-01-25        |
| Kansas            | NELAP               | E-10336               | 01-31-26        |
| Kentucky (WW)     | State               | KY98016               | 12-31-25        |
| Minnesota         | NELAP               | 039-999-348           | 12-31-25        |
| New Hampshire     | NELAP               | 225024                | 09-30-25        |
| New Jersey        | NELAP               | OH001                 | 07-03-25        |
| New York          | NELAP               | 10975                 | 04-01-25        |
| Ohio              | State               | 8303                  | 11-04-25        |
| Ohio VAP          | State               | ORELAP 4062           | 02-28-26        |
| Oregon            | NELAP               | 4062                  | 02-27-26        |
| Pennsylvania      | NELAP               | 68-00340              | 08-31-25        |
| Texas             | NELAP               | T104704517-22-19      | 08-31-25        |
| USDA              | US Federal Programs | P330-18-00281         | 01-05-27        |
| Virginia          | NELAP               | 460175                | 09-14-25        |
| West Virginia DEP | State               | 210                   | 12-31-25        |
| Wisconsin         | State               | 399167560             | 08-31-25        |

## Chain of Custody Record

TestAmerica Laboratory location: Farmington Hills — 38855 Hills Tech Drive, Suite 600, Farmington Hills 48331

|  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
|--|--|--|---|--|--------------------|---|-----------------------------------|--|--|--|--|--|--|--|-------------------------|--|--|--|--|
| <b>Client Contact</b>  |  |  | <b>Regulatory program:</b> <input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other  |  |                    | <b>TestAmerica Laboratories, Inc.</b>   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| Company Name: Arcadis  |  |  | Client Project Manager: Megan Meckley   |  |                    | Site Contact: Samantha Szpachler  |                                   |  | Lab Contact: Mike DelMonico              |  |  | COC No:                                      |  |  |                         |  |  |  |  |
| Address: 28550 Cabot Drive, Suite 500  |  |  | Telephone: 248-994-2240   |  |                    | Telephone: 248-994-2240   |                                   |  | Telephone: 330-497-9396                  |  |  | 1 of 1 COCs                                  |  |  |                         |  |  |  |  |
| City/State/Zip: Novi, MI, 48377  |  |  | Email: kristoffer.binskey@arcadis.com   |  |                    | <b>Analysis Turnaround Time</b>   |                                   |  | <b>Analyses</b>                          |  |  | For lab use only                             |  |  |                         |  |  |  |  |
| Phone: 248-994-2240  |  |  | Sampler Name: JOE FOSTIK  |  |                    | TAT if different from below   |                                   |  |  |  |  | Walk-in client                               |  |  |                         |  |  |  |  |
| Project Name: Ford LTP   |  |  | Method of Shipment/Carrier:   |  |                    | 10 day <input checked="" type="checkbox"/> 3 weeks <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day <input type="checkbox"/> |                                   |  |  |  |  | Lab sampling                                 |  |  |                         |  |  |  |  |
| Project Number: 30206169.0401.03   |  |  | Shipping/Tracking No:   |  |                    |   |                                   |  |  |  |  | Job/SDG No:                                  |  |  |                         |  |  |  |  |
| PO # US3460021848  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| <b>Sample Identification</b>   |  |  | <b>Sample Date</b>  |  | <b>Sample Time</b> |   | <b>Matrix</b>                     |  |  |  |  | <b>Containers &amp; Preservatives</b>        |  |  |                         |  | <b>Sample Specific Notes / Special Instructions:</b> |  |  |
|  |  |  |   |  |                    |   | Air Aqueous Sediment Solid Other: |  |  |  |  | H2SO4 HNO3 HCl NaOH ZnCl2 NaOH Unpres Other: |  |  |                         |  |  |  |  |
| TRIP BLANK_ 118  |  |  | ----  |  | ---                |   | 1                                 |  |  |  |  | 1  |  |  |                         |  | 1 Trip Blank   |  |  |
| MW-2085-022625   |  |  | 2-26-25   |  | 837                |   | 6                                 |  |  |  |  | 6  |  |  |                         |  | 3 VOAs for 8260D<br>3 VOAs for 8260D SIM             |  |  |
| MW-2085MS-022625   |  |  | 2-26-25   |  | 837                |   | 6                                 |  |  |  |  | 6  |  |  |                         |  | Run MS/MSD   |  |  |
| MW-2085MSD-022625  |  |  | 2-26-25   |  | 837                |   | 6                                 |  |  |  |  | 6  |  |  |                         |  | Run MS/MSD   |  |  |
| MW-2095-022625   |  |  | 2-26-25   |  | 950                |   | 6                                 |  |  |  |  | 6  |  |  |                         |  |  |  |  |
| MW-2105-022625   |  |  | 2-26-25   |  | 1050               |   | 6                                 |  |  |  |  | 6  |  |  |                         |  |  |  |  |
|                          |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  | 240-219646 COC                                       |  |  |
|  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
|  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
|  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| <b>Possible Hazard Identification</b>  |  |  | <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown |  |                    | <b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>  |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
|  |  |  |   |  |                    | <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For 1 Months  |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| <b>Special Instructions/QC Requirements &amp; Comments:</b>  |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728<br>Level IV Reporting requested. |  |  |   |  |                    |   |                                   |  |  |  |  |  |  |  |                         |  |  |  |  |
| Relinquished by: [Signature]   |  |  | Company: Arcadis  |  |                    | Date/Time: 2-26-25 1330   |                                   |  | Received by: Nov. Cold Storage           |  |  | Company: Arcadis                             |  |  | Date/Time: 2-26-25 1330 |  |  |  |  |
| Relinquished by: [Signature]   |  |  | Company: ARCAOIS  |  |                    | Date/Time: 2/27/25 1420   |                                   |  | Received by: [Signature]                 |  |  | Company: EETA                                |  |  | Date/Time: 2/27/25 1421 |  |  |  |  |
| Relinquished by: [Signature]   |  |  | Company: EETA   |  |                    | Date/Time: 2/27/25 1422   |                                   |  | Received in Laboratory by: JESSE MOROSKO |  |  | Company: EETA                                |  |  | Date/Time: 2/28/25 0820 |  |  |  |  |

Eurofins - Cleveland Sample Receipt Form/Narrative  
Barberton Facility

Login #

Client ARCADIS

Site Name

Cooler unpacked by

Cooler Received on 2/28/15

Opened on 2/28/15

JMOROSKO

FedEx: 1<sup>st</sup> Grd Exp UPS FAS W<sup>9</sup>ypmt

Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time

Storage Location

Eurofins Cooler # EC

Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag None Other

COOLANT. W<sup>1</sup>Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF TD, 0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1

-Were the seals on the outside of the cooler(s) signed & dated?

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?

-Were tamper/custody seals intact and uncompromised?

3 Shippers' packing slip attached to the cooler(s)?

4. Did custody papers accompany the sample(s)?

5 Were the custody papers relinquished & signed in the appropriate place?

6 Was/were the person(s) who collected the samples clearly identified on the COC?

7 Did all bottles arrive in good condition (Unbroken)?

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?

9 For each sample, does the COC specify preservative(s) (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?

10 Were correct bottle(s) used for the test(s) indicated?

11 Sufficient quantity received to perform indicated analyses?

12 Are these work share samples and all listed on the COC?

If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt?

14 Were VOAs on the COC?

15 Were air bubbles >6 mm in any VOA vials? ☒ Larger than this

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # COVERED

17 Was a LL Hg or Me Hg trip blank present?

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other

Concerning \_\_\_\_\_

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by: \_\_\_\_\_

19 SAMPLE CONDITION

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired

Sample(s) \_\_\_\_\_ were received in a broken container

Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) \_\_\_\_\_ were further preserved in the laboratory

Time preserved. \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_

VOA Sample Preservation - Date/Time VOAs Frozen. \_\_\_\_\_

Tests that are not checked for pH by Receiving  
VOAs  
Oil and Grease  
TOC





Temperature readings

| Client Sample ID | Lab ID             | Container Type                    | Container pH | Preservation Temp | Preservation Added | Preservation Lot Number |
|------------------|--------------------|-----------------------------------|--------------|-------------------|--------------------|-------------------------|
| TRIP BLANK_118   | 240-219646-A-1     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-A-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-A-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-A-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-B-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-B-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-B-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-C-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-C-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-C-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-D-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-D-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-D-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-E-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-E-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-E-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-F-2     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-F-2 MS  | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-208S_022625   | 240-219646-F-2 MSD | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-A-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-B-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-C-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-D-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-E-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-209S_022625   | 240-219646-F-3     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-A-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-B-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-C-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-D-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-E-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-210S_022625   | 240-219646-F-4     | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |



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

Client Sample ID

Lab ID

Container Type

Container   Preservation   Preservation  
pH   Temp   Added   Lot Number

# DATA VERIFICATION REPORT



March 13, 2025

Megan Meckley  
Arcadis  
28550 Cabot Drive  
Suite 500  
Novi, MI US 48377

CADENA project ID: E203728

Project: Ford Livonia Transmission Plant - ON-SITE Soil Gas, Ground Water and Soil

Project number: 30251157.401.04 (vapor 301.04) 30206169.0401.04

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 219646-1

Sample date: 2025-02-26

Report received by CADENA: 2025-03-13

Initial Data Verification completed by CADENA: 2025-03-13

Number of Samples:4

Sample Matrices:Water

Test Categories:GCMS VOC

**Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.**

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

## CADENA Valid Qualifiers

| Valid Qualifiers | Description  |
|------------------|--|
| <                | Less than the reported concentration.  |
| >                | Greater than the reported concentration.   |
| B                | The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminants) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration. |
| E                | The analyte / Compound reported exceeds the calibration range and is considered estimated.   |
| EMPC             | Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.  |
| J                | Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.                     |
| J-               | The result is an estimated quantity, but the result may be biased low.   |
| JB               | NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED   |
| JH               | The sample result is considered estimated and is potentially biased high.  |
| JL               | The sample result is considered estimated and is potentially biased low.   |
| JUB              | NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED  |
| NJ               | Tentatively identified compound with approximated concentration.   |
| R                | Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)  |
| TNTC             | Too Numerous to Count - Asbestos and Microbiological Results.  |
| U                | Indicates that the analyte / compound was analyzed for, but not detected.  |
| UB               | The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminants) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.   |
| UJ               | The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.  |

## Analytical Results Summary

**CADENA Project ID:** E203728

**Laboratory:** Eurofins Environment Testing LLC - Cleveland

**Laboratory Submittal:** 219646-1

**Sample Name:** TRIP BLANK\_118

**Lab Sample ID:** 2402196461

**Sample Date:** 2/26/2025

MW-208S\_022625

2402196462

2/26/2025

MW-209S\_022625

2402196463

2/26/2025

MW-210S\_022625

2402196464

2/26/2025

| Analyte | Cas No. | Report |       |       |           | Valid | Report |       |       |           | Valid | Report |       |       |           | Valid | Report |       |       |           | Valid |
|---------|---------|--------|-------|-------|-----------|-------|--------|-------|-------|-----------|-------|--------|-------|-------|-----------|-------|--------|-------|-------|-----------|-------|
|         |         | Result | Limit | Units | Qualifier |       | Result | Limit | Units | Qualifier |       | Result | Limit | Units | Qualifier |       | Result | Limit | Units | Qualifier |       |

### GC/MS VOC

#### OSW-8260D

|                          |          |    |     |      |     |    |     |      |     |      |     |      |     |     |     |      |     |
|--------------------------|----------|----|-----|------|-----|----|-----|------|-----|------|-----|------|-----|-----|-----|------|-----|
| 1,1-Dichloroethene       | 75-35-4  | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | ND   | 1.0 | ug/l | --- | ND  | 1.0 | ug/l | --- |
| cis-1,2-Dichloroethene   | 156-59-2 | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | 0.64 | 1.0 | ug/l | J   | 21  | 1.0 | ug/l | --- |
| Tetrachloroethene        | 127-18-4 | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | ND   | 1.0 | ug/l | --- | ND  | 1.0 | ug/l | --- |
| trans-1,2-Dichloroethene | 156-60-5 | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | ND   | 1.0 | ug/l | --- | 2.5 | 1.0 | ug/l | --- |
| Trichloroethene          | 79-01-6  | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | ND   | 1.0 | ug/l | --- | ND  | 1.0 | ug/l | --- |
| Vinyl chloride           | 75-01-4  | ND | 1.0 | ug/l | --- | ND | 1.0 | ug/l | --- | 3.0  | 1.0 | ug/l | --- | 16  | 1.0 | ug/l | --- |

#### OSW-8260DSIM

|             |          |  |  |  |  |    |     |      |     |    |     |      |     |      |     |      |   |
|-------------|----------|--|--|--|--|----|-----|------|-----|----|-----|------|-----|------|-----|------|---|
| 1,4-Dioxane | 123-91-1 |  |  |  |  | ND | 2.0 | ug/l | --- | ND | 2.0 | ug/l | --- | 0.95 | 2.0 | ug/l | J |
|-------------|----------|--|--|--|--|----|-----|------|-----|----|-----|------|-----|------|-----|------|---|