

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Megan Meckley  
Arcadis US Inc.  
28550 Cabot Drive  
Suite 500  
Novi, Michigan 48377

Generated 5/29/2025 3:03:28 PM

## JOB DESCRIPTION

Ford LTP

## JOB NUMBER

240-224762-1

# Eurofins Cleveland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Generated  
5/29/2025 3:03:28 PM

Authorized for release by  
Michael DelMonico, Project Manager I  
[Michael.DelMonico@et.eurofinsus.com](mailto:Michael.DelMonico@et.eurofinsus.com)  
(330)966-9783

# Table of Contents

|                                  |    |
|----------------------------------|----|
| Cover Page . . . . .             | 1  |
| Table of Contents . . . . .      | 3  |
| Definitions/Glossary . . . . .   | 4  |
| Case Narrative . . . . .         | 5  |
| Method Summary . . . . .         | 6  |
| Sample Summary . . . . .         | 7  |
| Detection Summary . . . . .      | 8  |
| Client Sample Results . . . . .  | 9  |
| Surrogate Summary . . . . .      | 14 |
| QC Sample Results . . . . .      | 15 |
| QC Association Summary . . . . . | 19 |
| Lab Chronicle . . . . .          | 20 |
| Certification Summary . . . . .  | 21 |
| Chain of Custody . . . . .       | 22 |



## Definitions/Glossary

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

Job ID: 240-224762-1

### 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: 240-224762-1

**Job ID: 240-224762-1**

**Eurofins Cleveland**

### **Job Narrative 240-224762-1**

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 5/17/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

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

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-656986 was outside the method criteria for the following analyte(s): 1,1-Dichloroethene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

Eurofins Cleveland

## Method Summary

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

Job ID: 240-224762-1

| 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: 240-224762-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 240-224762-1  | TRIP BLANK_87    | Water  | 05/14/25 00:00 | 05/17/25 08:00 |
| 240-224762-2  | MW-69_051425     | Water  | 05/14/25 09:55 | 05/17/25 08:00 |
| 240-224762-3  | MW-39_051425     | Water  | 05/14/25 11:00 | 05/17/25 08:00 |
| 240-224762-4  | MW-218S_051425   | Water  | 05/14/25 12:15 | 05/17/25 08:00 |
| 240-224762-5  | MW-32_051425     | Water  | 05/14/25 13:35 | 05/17/25 08:00 |

## Detection Summary

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

Job ID: 240-224762-1

**Client Sample ID: TRIP BLANK\_87**

**Lab Sample ID: 240-224762-1**

No Detections.

**Client Sample ID: MW-69\_051425**

**Lab Sample ID: 240-224762-2**

| Analyte        | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method    | Prep Type |
|----------------|--------|-----------|-----|------|------|---------|---|-----------|-----------|
| 1,4-Dioxane    | 8.8    |           | 2.0 | 0.86 | ug/L | 1       |   | 8260D SIM | Total/NA  |
| Vinyl chloride | 0.50   | J         | 1.0 | 0.45 | ug/L | 1       |   | 8260D     | Total/NA  |

**Client Sample ID: MW-39\_051425**

**Lab Sample ID: 240-224762-3**

No Detections.

**Client Sample ID: MW-218S\_051425**

**Lab Sample ID: 240-224762-4**

No Detections.

**Client Sample ID: MW-32\_051425**

**Lab Sample ID: 240-224762-5**

No Detections.

# Client Sample Results

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

Job ID: 240-224762-1

Client Sample ID: TRIP BLANK\_87

Lab Sample ID: 240-224762-1

Date Collected: 05/14/25 00:00

Matrix: Water

Date Received: 05/17/25 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 |   |          | 05/21/25 17:01 | 1       |
| cis-1,2-Dichloroethene   | 1.0    | U         | 1.0 | 0.46 | ug/L |   |          | 05/21/25 17:01 | 1       |
| Tetrachloroethene        | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 05/21/25 17:01 | 1       |
| trans-1,2-Dichloroethene | 1.0    | U         | 1.0 | 0.51 | ug/L |   |          | 05/21/25 17:01 | 1       |
| Trichloroethene          | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 05/21/25 17:01 | 1       |
| Vinyl chloride           | 1.0    | U         | 1.0 | 0.45 | ug/L |   |          | 05/21/25 17:01 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 120       |           | 62 - 137 |          | 05/21/25 17:01 | 1       |
| 4-Bromofluorobenzene (Surr)  | 100       |           | 56 - 136 |          | 05/21/25 17:01 | 1       |
| Toluene-d8 (Surr)            | 95        |           | 78 - 122 |          | 05/21/25 17:01 | 1       |
| Dibromofluoromethane (Surr)  | 108       |           | 73 - 120 |          | 05/21/25 17:01 | 1       |

# Client Sample Results

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

Job ID: 240-224762-1

Client Sample ID: MW-69\_051425

Lab Sample ID: 240-224762-2

Date Collected: 05/14/25 09:55

Matrix: Water

Date Received: 05/17/25 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 | 8.8    |           | 2.0 | 0.86 | ug/L |   |          | 05/28/25 16:38 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 82        |           | 68 - 127 |          | 05/28/25 16:38 | 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 |   |          | 05/21/25 23:03 | 1       |
| cis-1,2-Dichloroethene   | 1.0    | U         | 1.0 | 0.46 | ug/L |   |          | 05/21/25 23:03 | 1       |
| Tetrachloroethene        | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 05/21/25 23:03 | 1       |
| trans-1,2-Dichloroethene | 1.0    | U         | 1.0 | 0.51 | ug/L |   |          | 05/21/25 23:03 | 1       |
| Trichloroethene          | 1.0    | U         | 1.0 | 0.44 | ug/L |   |          | 05/21/25 23:03 | 1       |
| Vinyl chloride           | 0.50   | J         | 1.0 | 0.45 | ug/L |   |          | 05/21/25 23:03 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 113       |           | 62 - 137 |          | 05/21/25 23:03 | 1       |
| 4-Bromofluorobenzene (Surr)  | 97        |           | 56 - 136 |          | 05/21/25 23:03 | 1       |
| Toluene-d8 (Surr)            | 94        |           | 78 - 122 |          | 05/21/25 23:03 | 1       |
| Dibromofluoromethane (Surr)  | 102       |           | 73 - 120 |          | 05/21/25 23:03 | 1       |

# Client Sample Results

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

Job ID: 240-224762-1

Client Sample ID: MW-39\_051425

Lab Sample ID: 240-224762-3

Date Collected: 05/14/25 11:00

Matrix: Water

Date Received: 05/17/25 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 |   |          | 05/28/25 17:01 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 84        |           | 68 - 127 |      |      |   |          | 05/28/25 17:01 | 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 |   |          | 05/21/25 23:29 | 1       |
| cis-1,2-Dichloroethene       | 1.0       | U         | 1.0      | 0.46 | ug/L |   |          | 05/21/25 23:29 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/21/25 23:29 | 1       |
| trans-1,2-Dichloroethene     | 1.0       | U         | 1.0      | 0.51 | ug/L |   |          | 05/21/25 23:29 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/21/25 23:29 | 1       |
| Vinyl chloride               | 1.0       | U         | 1.0      | 0.45 | ug/L |   |          | 05/21/25 23:29 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 115       |           | 62 - 137 |      |      |   |          | 05/21/25 23:29 | 1       |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 56 - 136 |      |      |   |          | 05/21/25 23:29 | 1       |
| Toluene-d8 (Surr)            | 94        |           | 78 - 122 |      |      |   |          | 05/21/25 23:29 | 1       |
| Dibromofluoromethane (Surr)  | 105       |           | 73 - 120 |      |      |   |          | 05/21/25 23:29 | 1       |

# Client Sample Results

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

Job ID: 240-224762-1

Client Sample ID: MW-218S\_051425

Lab Sample ID: 240-224762-4

Date Collected: 05/14/25 12:15

Matrix: Water

Date Received: 05/17/25 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 |   |          | 05/28/25 17:25 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 82        |           | 68 - 127 |      |      |   |          | 05/28/25 17:25 | 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 |   |          | 05/22/25 05:31 | 1       |
| cis-1,2-Dichloroethene       | 1.0       | U         | 1.0      | 0.46 | ug/L |   |          | 05/22/25 05:31 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/22/25 05:31 | 1       |
| trans-1,2-Dichloroethene     | 1.0       | U         | 1.0      | 0.51 | ug/L |   |          | 05/22/25 05:31 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/22/25 05:31 | 1       |
| Vinyl chloride               | 1.0       | U         | 1.0      | 0.45 | ug/L |   |          | 05/22/25 05:31 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 118       |           | 62 - 137 |      |      |   |          | 05/22/25 05:31 | 1       |
| 4-Bromofluorobenzene (Surr)  | 93        |           | 56 - 136 |      |      |   |          | 05/22/25 05:31 | 1       |
| Toluene-d8 (Surr)            | 93        |           | 78 - 122 |      |      |   |          | 05/22/25 05:31 | 1       |
| Dibromofluoromethane (Surr)  | 104       |           | 73 - 120 |      |      |   |          | 05/22/25 05:31 | 1       |

# Client Sample Results

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

Job ID: 240-224762-1

Client Sample ID: MW-32\_051425

Lab Sample ID: 240-224762-5

Date Collected: 05/14/25 13:35

Matrix: Water

Date Received: 05/17/25 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 |   |          | 05/28/25 17:48 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 78        |           | 68 - 127 |      |      |   |          | 05/28/25 17:48 | 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 |   |          | 05/22/25 05:56 | 1       |
| cis-1,2-Dichloroethene       | 1.0       | U         | 1.0      | 0.46 | ug/L |   |          | 05/22/25 05:56 | 1       |
| Tetrachloroethene            | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/22/25 05:56 | 1       |
| trans-1,2-Dichloroethene     | 1.0       | U         | 1.0      | 0.51 | ug/L |   |          | 05/22/25 05:56 | 1       |
| Trichloroethene              | 1.0       | U         | 1.0      | 0.44 | ug/L |   |          | 05/22/25 05:56 | 1       |
| Vinyl chloride               | 1.0       | U         | 1.0      | 0.45 | ug/L |   |          | 05/22/25 05:56 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 120       |           | 62 - 137 |      |      |   |          | 05/22/25 05:56 | 1       |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 56 - 136 |      |      |   |          | 05/22/25 05:56 | 1       |
| Toluene-d8 (Surr)            | 95        |           | 78 - 122 |      |      |   |          | 05/22/25 05:56 | 1       |
| Dibromofluoromethane (Surr)  | 111       |           | 73 - 120 |      |      |   |          | 05/22/25 05:56 | 1       |

# Surrogate Summary

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

Job ID: 240-224762-1

## 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) |
| 240-224762-1                       | TRIP BLANK_87          | 120                                            | 100      | 95       | 108      |
| 240-224762-2                       | MW-69_051425           | 113                                            | 97       | 94       | 102      |
| 240-224762-3                       | MW-39_051425           | 115                                            | 96       | 94       | 105      |
| 240-224762-4                       | MW-218S_051425         | 118                                            | 93       | 93       | 104      |
| 240-224762-5                       | MW-32_051425           | 120                                            | 96       | 95       | 111      |
| 240-224764-B-2 MS                  | Matrix Spike           | 107                                            | 99       | 98       | 98       |
| 240-224764-B-2 MSD                 | Matrix Spike Duplicate | 112                                            | 97       | 97       | 104      |
| 240-224764-B-6 MSD                 | Matrix Spike Duplicate | 114                                            | 98       | 96       | 103      |
| 240-224764-C-6 MS                  | Matrix Spike           | 116                                            | 95       | 95       | 109      |
| LCS 240-656892/5                   | Lab Control Sample     | 112                                            | 94       | 92       | 107      |
| LCS 240-656986/3                   | Lab Control Sample     | 113                                            | 98       | 98       | 108      |
| MB 240-656892/10                   | Method Blank           | 115                                            | 98       | 93       | 105      |
| MB 240-656986/8                    | Method Blank           | 120                                            | 96       | 96       | 105      |
| <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)                                       |  |  |  |
| 240-224762-2                       | MW-69_051425           | 82                                             |  |  |  |
| 240-224762-3                       | MW-39_051425           | 84                                             |  |  |  |
| 240-224762-4                       | MW-218S_051425         | 82                                             |  |  |  |
| 240-224762-5                       | MW-32_051425           | 78                                             |  |  |  |
| 240-224764-A-6 MS                  | Matrix Spike           | 84                                             |  |  |  |
| 240-224764-A-6 MSD                 | Matrix Spike Duplicate | 81                                             |  |  |  |
| LCS 240-657615/6                   | Lab Control Sample     | 81                                             |  |  |  |
| MB 240-657615/8                    | Method Blank           | 82                                             |  |  |  |
| <b>Surrogate Legend</b>            |                        |                                                |  |  |  |
| DCA = 1,2-Dichloroethane-d4 (Surr) |                        |                                                |  |  |  |

# QC Sample Results

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

Job ID: 240-224762-1

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

Lab Sample ID: MB 240-656892/10

Matrix: Water

Analysis Batch: 656892

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 |   |          | 05/21/25 16:09 | 1       |
| cis-1,2-Dichloroethene   | 1.0       | U            | 1.0 | 0.46 | ug/L |   |          | 05/21/25 16:09 | 1       |
| Tetrachloroethene        | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 05/21/25 16:09 | 1       |
| trans-1,2-Dichloroethene | 1.0       | U            | 1.0 | 0.51 | ug/L |   |          | 05/21/25 16:09 | 1       |
| Trichloroethene          | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 05/21/25 16:09 | 1       |
| Vinyl chloride           | 1.0       | U            | 1.0 | 0.45 | ug/L |   |          | 05/21/25 16:09 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 115          |              | 62 - 137 |          | 05/21/25 16:09 | 1       |
| 4-Bromofluorobenzene (Surr)  | 98           |              | 56 - 136 |          | 05/21/25 16:09 | 1       |
| Toluene-d8 (Surr)            | 93           |              | 78 - 122 |          | 05/21/25 16:09 | 1       |
| Dibromofluoromethane (Surr)  | 105          |              | 73 - 120 |          | 05/21/25 16:09 | 1       |

Lab Sample ID: LCS 240-656892/5

Matrix: Water

Analysis Batch: 656892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 20.0        | 19.5       |               | ug/L |   | 97   | 63 - 134    |
| cis-1,2-Dichloroethene   | 20.0        | 20.1       |               | ug/L |   | 100  | 77 - 123    |
| Tetrachloroethene        | 20.0        | 18.9       |               | ug/L |   | 94   | 76 - 123    |
| trans-1,2-Dichloroethene | 20.0        | 19.8       |               | ug/L |   | 99   | 75 - 124    |
| Trichloroethene          | 20.0        | 19.5       |               | ug/L |   | 97   | 70 - 122    |
| Vinyl chloride           | 20.0        | 15.4       |               | ug/L |   | 77   | 60 - 144    |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 112           |               | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 94            |               | 56 - 136 |
| Toluene-d8 (Surr)            | 92            |               | 78 - 122 |
| Dibromofluoromethane (Surr)  | 107           |               | 73 - 120 |

Lab Sample ID: 240-224764-B-2 MS

Matrix: Water

Analysis Batch: 656892

Client Sample ID: Matrix Spike

Prep Type: Total/NA

| Analyte                  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 1.0           | U                | 20.0        | 18.0      |              | ug/L |   | 90   | 56 - 135    |
| cis-1,2-Dichloroethene   | 1.0           | U                | 20.0        | 17.4      |              | ug/L |   | 87   | 66 - 128    |
| Tetrachloroethene        | 1.0           | U                | 20.0        | 19.7      |              | ug/L |   | 98   | 62 - 131    |
| trans-1,2-Dichloroethene | 1.0           | U                | 20.0        | 18.1      |              | ug/L |   | 91   | 56 - 136    |
| Trichloroethene          | 1.0           | U                | 20.0        | 18.2      |              | ug/L |   | 91   | 61 - 124    |
| Vinyl chloride           | 1.0           | U                | 20.0        | 14.5      |              | ug/L |   | 72   | 43 - 157    |

| Surrogate                    | MS %Recovery | MS Qualifier | Limits   |
|------------------------------|--------------|--------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 107          |              | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 99           |              | 56 - 136 |
| Toluene-d8 (Surr)            | 98           |              | 78 - 122 |

Eurofins Cleveland

# QC Sample Results

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

Job ID: 240-224762-1

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

Lab Sample ID: 240-224764-B-2 MS

Matrix: Water

Analysis Batch: 656892

Client Sample ID: Matrix Spike

Prep Type: Total/NA

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| Dibromofluoromethane (Surr) | 98        |           | 73 - 120 |

Lab Sample ID: 240-224764-B-2 MSD

Matrix: Water

Analysis Batch: 656892

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 |
|--------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| 1,1-Dichloroethene       | 1.0           | U                | 20.0        | 19.1       |               | ug/L |   | 95   | 56 - 135    | 6   | 26        |
| cis-1,2-Dichloroethene   | 1.0           | U                | 20.0        | 18.8       |               | ug/L |   | 94   | 66 - 128    | 8   | 14        |
| Tetrachloroethene        | 1.0           | U                | 20.0        | 19.5       |               | ug/L |   | 97   | 62 - 131    | 1   | 20        |
| trans-1,2-Dichloroethene | 1.0           | U                | 20.0        | 19.0       |               | ug/L |   | 95   | 56 - 136    | 5   | 15        |
| Trichloroethene          | 1.0           | U                | 20.0        | 19.1       |               | ug/L |   | 95   | 61 - 124    | 5   | 15        |
| Vinyl chloride           | 1.0           | U                | 20.0        | 16.0       |               | ug/L |   | 80   | 43 - 157    | 10  | 24        |

|                              | MSD       | MSD       |          |
|------------------------------|-----------|-----------|----------|
| Surrogate                    | %Recovery | Qualifier | Limits   |
| 1,2-Dichloroethane-d4 (Surr) | 112       |           | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 97        |           | 56 - 136 |
| Toluene-d8 (Surr)            | 97        |           | 78 - 122 |
| Dibromofluoromethane (Surr)  | 104       |           | 73 - 120 |

Lab Sample ID: MB 240-656986/8

Matrix: Water

Analysis Batch: 656986

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 |   |          | 05/22/25 05:05 | 1       |
| cis-1,2-Dichloroethene   | 1.0       | U            | 1.0 | 0.46 | ug/L |   |          | 05/22/25 05:05 | 1       |
| Tetrachloroethene        | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 05/22/25 05:05 | 1       |
| trans-1,2-Dichloroethene | 1.0       | U            | 1.0 | 0.51 | ug/L |   |          | 05/22/25 05:05 | 1       |
| Trichloroethene          | 1.0       | U            | 1.0 | 0.44 | ug/L |   |          | 05/22/25 05:05 | 1       |
| Vinyl chloride           | 1.0       | U            | 1.0 | 0.45 | ug/L |   |          | 05/22/25 05:05 | 1       |

|                              | MB        | MB        |          |          |                |         |  |  |  |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|--|--|--|
| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |  |  |  |
| 1,2-Dichloroethane-d4 (Surr) | 120       |           | 62 - 137 |          | 05/22/25 05:05 | 1       |  |  |  |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 56 - 136 |          | 05/22/25 05:05 | 1       |  |  |  |
| Toluene-d8 (Surr)            | 96        |           | 78 - 122 |          | 05/22/25 05:05 | 1       |  |  |  |
| Dibromofluoromethane (Surr)  | 105       |           | 73 - 120 |          | 05/22/25 05:05 | 1       |  |  |  |

Lab Sample ID: LCS 240-656986/3

Matrix: Water

Analysis Batch: 656986

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 20.0        | 18.4       |               | ug/L |   | 92   | 63 - 134    |
| cis-1,2-Dichloroethene   | 20.0        | 19.0       |               | ug/L |   | 95   | 77 - 123    |
| Tetrachloroethene        | 20.0        | 17.2       |               | ug/L |   | 86   | 76 - 123    |
| trans-1,2-Dichloroethene | 20.0        | 18.7       |               | ug/L |   | 93   | 75 - 124    |
| Trichloroethene          | 20.0        | 18.0       |               | ug/L |   | 90   | 70 - 122    |

Eurofins Cleveland

# QC Sample Results

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

Job ID: 240-224762-1

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

Lab Sample ID: LCS 240-656986/3

Matrix: Water

Analysis Batch: 656986

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte        | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------|-------------|------------|---------------|------|---|------|-------------|
| Vinyl chloride | 20.0        | 15.3       |               | ug/L |   | 76   | 60 - 144    |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 113           |               | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 98            |               | 56 - 136 |
| Toluene-d8 (Surr)            | 98            |               | 78 - 122 |
| Dibromofluoromethane (Surr)  | 108           |               | 73 - 120 |

Lab Sample ID: 240-224764-B-6 MSD

Matrix: Water

Analysis Batch: 656986

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 |
|--------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| 1,1-Dichloroethene       | 1.0           | U                | 20.0        | 19.7       |               | ug/L |   | 98   | 56 - 135    | 1   | 26        |
| cis-1,2-Dichloroethene   | 1.0           | U                | 20.0        | 18.7       |               | ug/L |   | 93   | 66 - 128    | 2   | 14        |
| Tetrachloroethene        | 1.0           | U                | 20.0        | 19.5       |               | ug/L |   | 97   | 62 - 131    | 2   | 20        |
| trans-1,2-Dichloroethene | 1.0           | U                | 20.0        | 19.2       |               | ug/L |   | 96   | 56 - 136    | 0   | 15        |
| Trichloroethene          | 1.0           | U                | 20.0        | 18.8       |               | ug/L |   | 94   | 61 - 124    | 3   | 15        |
| Vinyl chloride           | 1.0           | U                | 20.0        | 17.4       |               | ug/L |   | 87   | 43 - 157    | 1   | 24        |

| Surrogate                    | MSD %Recovery | MSD Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 114           |               | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 98            |               | 56 - 136 |
| Toluene-d8 (Surr)            | 96            |               | 78 - 122 |
| Dibromofluoromethane (Surr)  | 103           |               | 73 - 120 |

Lab Sample ID: 240-224764-C-6 MS

Matrix: Water

Analysis Batch: 656986

Client Sample ID: Matrix Spike

Prep Type: Total/NA

| Analyte                  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| 1,1-Dichloroethene       | 1.0           | U                | 20.0        | 19.5      |              | ug/L |   | 98   | 56 - 135    |
| cis-1,2-Dichloroethene   | 1.0           | U                | 20.0        | 19.1      |              | ug/L |   | 96   | 66 - 128    |
| Tetrachloroethene        | 1.0           | U                | 20.0        | 19.2      |              | ug/L |   | 96   | 62 - 131    |
| trans-1,2-Dichloroethene | 1.0           | U                | 20.0        | 19.3      |              | ug/L |   | 96   | 56 - 136    |
| Trichloroethene          | 1.0           | U                | 20.0        | 18.2      |              | ug/L |   | 91   | 61 - 124    |
| Vinyl chloride           | 1.0           | U                | 20.0        | 17.5      |              | ug/L |   | 88   | 43 - 157    |

| Surrogate                    | MS %Recovery | MS Qualifier | Limits   |
|------------------------------|--------------|--------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 116          |              | 62 - 137 |
| 4-Bromofluorobenzene (Surr)  | 95           |              | 56 - 136 |
| Toluene-d8 (Surr)            | 95           |              | 78 - 122 |
| Dibromofluoromethane (Surr)  | 109          |              | 73 - 120 |

# QC Sample Results

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

Job ID: 240-224762-1

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

Lab Sample ID: MB 240-657615/8

Matrix: Water

Analysis Batch: 657615

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                      | MB<br>Result    | MB<br>Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------------|-----------------|----------|------|------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 2.0             | U               | 2.0      | 0.86 | ug/L |   |          | 05/28/25 12:20 | 1       |
| Surrogate                    | MB<br>%Recovery | MB<br>Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 82              |                 | 68 - 127 |      |      |   |          | 05/28/25 12:20 | 1       |

Lab Sample ID: LCS 240-657615/6

Matrix: Water

Analysis Batch: 657615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                      | Spike<br>Added   | LCS<br>Result    | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|------------------------------|------------------|------------------|------------------|------|---|------|----------------|
| 1,4-Dioxane                  | 10.0             | 8.38             |                  | ug/L |   | 84   | 75 - 121       |
| Surrogate                    | LCS<br>%Recovery | LCS<br>Qualifier | Limits           |      |   |      |                |
| 1,2-Dichloroethane-d4 (Surr) | 81               |                  | 68 - 127         |      |   |      |                |

Lab Sample ID: 240-224764-A-6 MS

Matrix: Water

Analysis Batch: 657615

Client Sample ID: Matrix Spike

Prep Type: Total/NA

| Analyte                      | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|------------------------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|----------------|
| 1,4-Dioxane                  | 2.0              | U                   | 10.0           | 8.47         |                 | ug/L |   | 85   | 20 - 180       |
| Surrogate                    | MS<br>%Recovery  | MS<br>Qualifier     | Limits         |              |                 |      |   |      |                |
| 1,2-Dichloroethane-d4 (Surr) | 84               |                     | 68 - 127       |              |                 |      |   |      |                |

Lab Sample ID: 240-224764-A-6 MSD

Matrix: Water

Analysis Batch: 657615

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

| Analyte                      | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|------------------------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|----------------|-----|--------------|
| 1,4-Dioxane                  | 2.0              | U                   | 10.0           | 9.02          |                  | ug/L |   | 90   | 20 - 180       | 6   | 20           |
| Surrogate                    | MSD<br>%Recovery | MSD<br>Qualifier    | Limits         |               |                  |      |   |      |                |     |              |
| 1,2-Dichloroethane-d4 (Surr) | 81               |                     | 68 - 127       |               |                  |      |   |      |                |     |              |

## QC Association Summary

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

Job ID: 240-224762-1

### GC/MS VOA

#### Analysis Batch: 656892

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 240-224762-1       | TRIP BLANK_87          | Total/NA  | Water  | 8260D  |            |
| 240-224762-2       | MW-69_051425           | Total/NA  | Water  | 8260D  |            |
| 240-224762-3       | MW-39_051425           | Total/NA  | Water  | 8260D  |            |
| MB 240-656892/10   | Method Blank           | Total/NA  | Water  | 8260D  |            |
| LCS 240-656892/5   | Lab Control Sample     | Total/NA  | Water  | 8260D  |            |
| 240-224764-B-2 MS  | Matrix Spike           | Total/NA  | Water  | 8260D  |            |
| 240-224764-B-2 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260D  |            |

#### Analysis Batch: 656986

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 240-224762-4       | MW-218S_051425         | Total/NA  | Water  | 8260D  |            |
| 240-224762-5       | MW-32_051425           | Total/NA  | Water  | 8260D  |            |
| MB 240-656986/8    | Method Blank           | Total/NA  | Water  | 8260D  |            |
| LCS 240-656986/3   | Lab Control Sample     | Total/NA  | Water  | 8260D  |            |
| 240-224764-B-6 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260D  |            |
| 240-224764-C-6 MS  | Matrix Spike           | Total/NA  | Water  | 8260D  |            |

#### Analysis Batch: 657615

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method    | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 240-224762-2       | MW-69_051425           | Total/NA  | Water  | 8260D SIM |            |
| 240-224762-3       | MW-39_051425           | Total/NA  | Water  | 8260D SIM |            |
| 240-224762-4       | MW-218S_051425         | Total/NA  | Water  | 8260D SIM |            |
| 240-224762-5       | MW-32_051425           | Total/NA  | Water  | 8260D SIM |            |
| MB 240-657615/8    | Method Blank           | Total/NA  | Water  | 8260D SIM |            |
| LCS 240-657615/6   | Lab Control Sample     | Total/NA  | Water  | 8260D SIM |            |
| 240-224764-A-6 MS  | Matrix Spike           | Total/NA  | Water  | 8260D SIM |            |
| 240-224764-A-6 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260D SIM |            |

# Lab Chronicle

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

Job ID: 240-224762-1

**Client Sample ID: TRIP BLANK\_87**

**Lab Sample ID: 240-224762-1**

Date Collected: 05/14/25 00:00

Matrix: Water

Date Received: 05/17/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 656892       | AJS     | EET CLE | 05/21/25 17:01       |

**Client Sample ID: MW-69\_051425**

**Lab Sample ID: 240-224762-2**

Date Collected: 05/14/25 09:55

Matrix: Water

Date Received: 05/17/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 656892       | AJS     | EET CLE | 05/21/25 23:03       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 657615       | R5XG    | EET CLE | 05/28/25 16:38       |

**Client Sample ID: MW-39\_051425**

**Lab Sample ID: 240-224762-3**

Date Collected: 05/14/25 11:00

Matrix: Water

Date Received: 05/17/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 656892       | AJS     | EET CLE | 05/21/25 23:29       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 657615       | R5XG    | EET CLE | 05/28/25 17:01       |

**Client Sample ID: MW-218S\_051425**

**Lab Sample ID: 240-224762-4**

Date Collected: 05/14/25 12:15

Matrix: Water

Date Received: 05/17/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 656986       | AJS     | EET CLE | 05/22/25 05:31       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 657615       | R5XG    | EET CLE | 05/28/25 17:25       |

**Client Sample ID: MW-32\_051425**

**Lab Sample ID: 240-224762-5**

Date Collected: 05/14/25 13:35

Matrix: Water

Date Received: 05/17/25 08:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 656986       | AJS     | EET CLE | 05/22/25 05:56       |
| Total/NA  | Analysis   | 8260D SIM    |     | 1               | 657615       | R5XG    | EET CLE | 05/28/25 17:48       |

## 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: 240-224762-1

### 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 (UST)     | State               | 112225                | 02-28-26        |
| 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                 | 04-01-26        |
| North Dakota       | State               | R-244                 | 02-27-26        |
| 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        |
| US Fish & Wildlife | US Federal Programs | A26406                | 02-28-26        |
| 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        |

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

[illegible]

Eurofins - Cleveland Sample Receipt Form/Narrative Login # \_\_\_\_\_

Barberton Facility

Client MACONIS Site Name \_\_\_\_\_ Cooler unpacked by: JMOROSKO

Cooler Received on 5/17/25 Opened on 5/17/25

FedEx: 1<sup>st</sup> Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other \_\_\_\_\_

Receipt After-hours Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_

Eurofins Cooler # FC Foam Box Client Cooler Box Other \_\_\_\_\_

Packing material used. Bubble Wrap Wet Ice Foam Plastic Bag None Other \_\_\_\_\_

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF TD.5 °C) Observed Cooler Temp 24 °C Corrected Cooler Temp 2.9 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ☒ Yes ☐ No ☐ NA

-Were the seals on the outside of the cooler(s) signed & dated? ☒ Yes ☐ No ☐ NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/Methg)? ☒ Yes ☐ No ☐ NA

-Were tamper/custody seals intact and uncompromised? ☒ Yes ☐ No ☐ NA

3 Shippers' packing slip attached to the cooler(s)? ☒ Yes ☐ No ☐ NA

4 Did custody papers accompany the sample(s)? ☒ Yes ☐ No ☐ NA

5 Were the custody papers relinquished & signed in the appropriate place? ☒ Yes ☐ No ☐ NA

6 Was/were the person(s) who collected the samples clearly identified on the COC? ☒ Yes ☐ No ☐ NA

7 Did all bottles arrive in good condition (Unbroken)? ☒ Yes ☐ No ☐ NA

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? ☒ Yes ☐ No ☐ NA

9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? ☒ Yes ☐ No ☐ NA

10 Were correct bottle(s) used for the test(s) indicated? ☒ Yes ☐ No ☐ NA

11 Sufficient quantity received to perform indicated analyses? ☒ Yes ☐ No ☐ NA

12 Are these work share samples and all listed on the COC? ☒ Yes ☐ No ☐ NA

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

13 Were all preserved sample(s) at the correct pH upon receipt? ☒ Yes ☐ No ☐ NA pH Strip Lot# HC457151

14 Were VOAs on the COC? ☒ Yes ☐ No ☐ NA

15 Were air bubbles >6 mm in any VOA vials? ☒ Yes ☐ No ☐ NA

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # covered ☒ Yes ☐ No ☐ NA

17 Was a LL Hg or Me Hg trip blank present? ☒ Yes ☐ No ☐ NA

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

Concerning \_\_\_\_\_

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by \_\_\_\_\_ Labels Verified 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 \_\_\_\_\_

5/17/2025

Login Container Summary Report

240-224762

Temperature readings:

| Client Sample ID | Lab ID         | Container Type                    | Container pH | Preservation Temp | Preservation Added | Preservation Lot Number |
|------------------|----------------|-----------------------------------|--------------|-------------------|--------------------|-------------------------|
| TRIP BLANK_87    | 240-224762-A-1 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-A-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-B-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-C-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-D-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-E-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-69_051425     | 240-224762-F-2 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-A-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-B-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-C-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-D-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-E-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-39_051425     | 240-224762-F-3 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-A-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-B-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-C-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-D-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-E-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-218S_051425   | 240-224762-F-4 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-A-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-B-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-C-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-D-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-E-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |
| MW-32_051425     | 240-224762-F-5 | Voa Vial 40ml - Hydrochloric Acid |              |                   |                    |                         |

# DATA VERIFICATION REPORT



May 29, 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)

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 224762-1

Sample date: 2025-05-14

Report received by CADENA: 2025-05-29

Initial Data Verification completed by CADENA: 2025-05-29

Number of Samples:5

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.**

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch CCV response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, 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: 224762-1

|                          |          |                            |       |       |           |              |       |       |           |              |       |       |           |                |       |       |           |              |       |       |           |  |
|--------------------------|----------|----------------------------|-------|-------|-----------|--------------|-------|-------|-----------|--------------|-------|-------|-----------|----------------|-------|-------|-----------|--------------|-------|-------|-----------|--|
|                          |          | Sample Name: TRIP BLANK_87 |       |       |           | MW-69_051425 |       |       |           | MW-39_051425 |       |       |           | MW-218S_051425 |       |       |           | MW-32_051425 |       |       |           |  |
|                          |          | Lab Sample ID: 2402247621  |       |       |           | 2402247622   |       |       |           | 2402247623   |       |       |           | 2402247624     |       |       |           | 2402247625   |       |       |           |  |
|                          |          | Sample Date: 5/14/2025     |       |       |           | 5/14/2025    |       |       |           | 5/14/2025    |       |       |           | 5/14/2025      |       |       |           | 5/14/2025    |       |       |           |  |
| Analyte                  | Cas No.  | Report                     |       |       | Valid     | Report       |       |       | Valid     | Report       |       |       | Valid     | Report         |       |       | Valid     | Report       |       |       | Valid     |  |
|                          |          | Result                     | Limit | Units | Qualifier | 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  | ---       | ND           | 1.0   | ug/l  | ---       |  |
| cis-1,2-Dichloroethene   | 156-59-2 | ND                         | 1.0   | ug/l  | ---       | ND           | 1.0   | ug/l  | ---       | ND           | 1.0   | ug/l  | ---       | ND             | 1.0   | ug/l  | ---       | ND           | 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  | ---       | 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  | ---       | ND             | 1.0   | ug/l  | ---       | ND           | 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  | ---       | ND           | 1.0   | ug/l  | ---       |  |
| Vinyl chloride           | 75-01-4  | ND                         | 1.0   | ug/l  | ---       | 0.50         | 1.0   | ug/l  | J         | ND           | 1.0   | ug/l  | ---       | ND             | 1.0   | ug/l  | ---       | ND           | 1.0   | ug/l  | ---       |  |
| OSW-8260DSIM             |          |                            |       |       |           |              |       |       |           |              |       |       |           |                |       |       |           |              |       |       |           |  |
| 1,4-Dioxane              | 123-91-1 |                            |       |       |           | 8.8          | 2.0   | ug/l  | ---       | ND           | 2.0   | ug/l  | ---       | ND             | 2.0   | ug/l  | ---       | ND           | 2.0   | ug/l  | ---       |  |