

ANALYTICAL REPORT

PREPARED FOR

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Suite 500
Novi, Michigan 48377

Generated 8/29/2023 10:52:47 AM

JOB DESCRIPTION

Ford LTP - On Site

JOB NUMBER

240-190326-1

Eurofins Cleveland

Job Notes

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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



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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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. |
|----------------|---|
| α | 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/Site: Ford LTP - On Site

Job ID: 240-190326-1

Job ID: 240-190326-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-190326-1**

Receipt

The samples were received on 8/17/2023 5:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

GC/MS VOA

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-584983.

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



Method Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

| 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

- 1
- 2
- 3
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- 5
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- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 240-190326-1 | TRIP BLANK_68 | Water | 08/15/23 00:00 | 08/17/23 17:37 |
| 240-190326-2 | MW-208S_081523 | Water | 08/15/23 13:20 | 08/17/23 17:37 |
| 240-190326-3 | MW-209S_081523 | Water | 08/15/23 14:45 | 08/17/23 17:37 |
| 240-190326-4 | MW-210S_081523 | Water | 08/15/23 11:50 | 08/17/23 17:37 |

- 1
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- 10
- 11
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- 13
- 14

Detection Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

Client Sample ID: TRIP BLANK_68

Lab Sample ID: 240-190326-1

No Detections.

Client Sample ID: MW-208S_081523

Lab Sample ID: 240-190326-2

No Detections.

Client Sample ID: MW-209S_081523

Lab Sample ID: 240-190326-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Vinyl chloride | 0.79 | J | 1.0 | 0.45 | ug/L | 1 | | 8260D | Total/NA |

Client Sample ID: MW-210S_081523

Lab Sample ID: 240-190326-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 16 | | 1.0 | 0.46 | ug/L | 1 | | 8260D | Total/NA |
| trans-1,2-Dichloroethene | 2.1 | | 1.0 | 0.51 | ug/L | 1 | | 8260D | Total/NA |
| Vinyl chloride | 3.6 | | 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 - On Site

Job ID: 240-190326-1

Client Sample ID: TRIP BLANK_68

Lab Sample ID: 240-190326-1

Date Collected: 08/15/23 00:00

Matrix: Water

Date Received: 08/17/23 17:37

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 | | | 08/23/23 21:31 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.46 | ug/L | | | 08/23/23 21:31 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/23/23 21:31 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.51 | ug/L | | | 08/23/23 21:31 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/23/23 21:31 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.45 | ug/L | | | 08/23/23 21:31 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 121 | | 62 - 137 | | 08/23/23 21:31 | 1 |
| 4-Bromofluorobenzene (Surr) | 104 | | 56 - 136 | | 08/23/23 21:31 | 1 |
| Toluene-d8 (Surr) | 101 | | 78 - 122 | | 08/23/23 21:31 | 1 |
| Dibromofluoromethane (Surr) | 113 | | 73 - 120 | | 08/23/23 21:31 | 1 |

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

Client Sample ID: MW-208S_081523

Lab Sample ID: 240-190326-2

Date Collected: 08/15/23 13:20

Matrix: Water

Date Received: 08/17/23 17:37

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 | | | 08/24/23 17:45 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 116 | | 66 - 120 | | | | | 08/24/23 17:45 | 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 | | | 08/24/23 12:00 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.46 | ug/L | | | 08/24/23 12:00 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:00 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.51 | ug/L | | | 08/24/23 12:00 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:00 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.45 | ug/L | | | 08/24/23 12:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 116 | | 62 - 137 | | | | | 08/24/23 12:00 | 1 |
| 4-Bromofluorobenzene (Surr) | 102 | | 56 - 136 | | | | | 08/24/23 12:00 | 1 |
| Toluene-d8 (Surr) | 99 | | 78 - 122 | | | | | 08/24/23 12:00 | 1 |
| Dibromofluoromethane (Surr) | 100 | | 73 - 120 | | | | | 08/24/23 12:00 | 1 |

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

Client Sample ID: MW-209S_081523

Lab Sample ID: 240-190326-3

Date Collected: 08/15/23 14:45

Matrix: Water

Date Received: 08/17/23 17:37

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 | | | 08/24/23 18:09 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 111 | | 66 - 120 | | | | | 08/24/23 18:09 | 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 | | | 08/24/23 12:26 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.46 | ug/L | | | 08/24/23 12:26 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:26 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.51 | ug/L | | | 08/24/23 12:26 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:26 | 1 |
| Vinyl chloride | 0.79 | J | 1.0 | 0.45 | ug/L | | | 08/24/23 12:26 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 121 | | 62 - 137 | | | | | 08/24/23 12:26 | 1 |
| 4-Bromofluorobenzene (Surr) | 99 | | 56 - 136 | | | | | 08/24/23 12:26 | 1 |
| Toluene-d8 (Surr) | 98 | | 78 - 122 | | | | | 08/24/23 12:26 | 1 |
| Dibromofluoromethane (Surr) | 107 | | 73 - 120 | | | | | 08/24/23 12:26 | 1 |

Client Sample Results

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

Client Sample ID: MW-210S_081523

Lab Sample ID: 240-190326-4

Date Collected: 08/15/23 11:50

Matrix: Water

Date Received: 08/17/23 17:37

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 | | | 08/25/23 14:55 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 111 | | 66 - 120 | | | | | 08/25/23 14:55 | 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 | | | 08/24/23 12:51 | 1 |
| cis-1,2-Dichloroethene | 16 | | 1.0 | 0.46 | ug/L | | | 08/24/23 12:51 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:51 | 1 |
| trans-1,2-Dichloroethene | 2.1 | | 1.0 | 0.51 | ug/L | | | 08/24/23 12:51 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/24/23 12:51 | 1 |
| Vinyl chloride | 3.6 | | 1.0 | 0.45 | ug/L | | | 08/24/23 12:51 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 116 | | 62 - 137 | | | | | 08/24/23 12:51 | 1 |
| 4-Bromofluorobenzene (Surr) | 101 | | 56 - 136 | | | | | 08/24/23 12:51 | 1 |
| Toluene-d8 (Surr) | 99 | | 78 - 122 | | | | | 08/24/23 12:51 | 1 |
| Dibromofluoromethane (Surr) | 99 | | 73 - 120 | | | | | 08/24/23 12:51 | 1 |

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---------------------|------------------------|--|-----------------|-----------------|------------------|
| | | DCA (62-137) | BFB (56-136) | TOL (78-122) | DBFM (73-120) |
| 240-190100-H-10 MS | Matrix Spike | 116 | 99 | 101 | 113 |
| 240-190100-I-10 MSD | Matrix Spike Duplicate | 114 | 97 | 99 | 113 |
| 240-190326-1 | TRIP BLANK_68 | 121 | 104 | 101 | 113 |
| 240-190326-2 | MW-208S_081523 | 116 | 102 | 99 | 100 |
| 240-190326-3 | MW-209S_081523 | 121 | 99 | 98 | 107 |
| 240-190326-4 | MW-210S_081523 | 116 | 101 | 99 | 99 |
| LCS 240-584910/5 | Lab Control Sample | 117 | 102 | 101 | 114 |
| LCS 240-584983/5 | Lab Control Sample | 113 | 98 | 99 | 107 |
| MB 240-584910/9 | Method Blank | 119 | 100 | 100 | 112 |
| MB 240-584983/9 | Method Blank | 116 | 97 | 98 | 108 |

Surrogate Legend

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

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |
|--------------------|------------------------|--|
| | | DCA (66-120) |
| 240-190226-C-2 MS | Matrix Spike | 109 |
| 240-190226-C-2 MSD | Matrix Spike Duplicate | 99 |
| 240-190229-C-3 MS | Matrix Spike | 111 |
| 240-190229-C-3 MSD | Matrix Spike Duplicate | 111 |
| 240-190326-2 | MW-208S_081523 | 116 |
| 240-190326-3 | MW-209S_081523 | 111 |
| 240-190326-4 | MW-210S_081523 | 111 |
| LCS 240-585005/5 | Lab Control Sample | 112 |
| LCS 240-585153/5 | Lab Control Sample | 100 |
| MB 240-585005/7 | Method Blank | 106 |
| MB 240-585153/7 | Method Blank | 108 |

Surrogate Legend

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

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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

Lab Sample ID: MB 240-584910/9
Matrix: Water
Analysis Batch: 584910

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

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.49 | ug/L | | | 08/23/23 14:56 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.46 | ug/L | | | 08/23/23 14:56 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/23/23 14:56 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.51 | ug/L | | | 08/23/23 14:56 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | | 08/23/23 14:56 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.45 | ug/L | | | 08/23/23 14:56 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 119 | | 62 - 137 | | 08/23/23 14:56 | 1 |
| 4-Bromofluorobenzene (Surr) | 100 | | 56 - 136 | | 08/23/23 14:56 | 1 |
| Toluene-d8 (Surr) | 100 | | 78 - 122 | | 08/23/23 14:56 | 1 |
| Dibromofluoromethane (Surr) | 112 | | 73 - 120 | | 08/23/23 14:56 | 1 |

Lab Sample ID: LCS 240-584910/5
Matrix: Water
Analysis Batch: 584910

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

| Analyte | Spike Added | LCS | LCS | Unit | D | %Rec | %Rec Limits |
|--------------------------|-------------|--------|-----------|------|---|------|-------------|
| | | Result | Qualifier | | | | |
| 1,1-Dichloroethene | 20.0 | 22.5 | | ug/L | | 112 | 63 - 134 |
| cis-1,2-Dichloroethene | 20.0 | 19.9 | | ug/L | | 100 | 77 - 123 |
| Tetrachloroethene | 20.0 | 19.0 | | ug/L | | 95 | 76 - 123 |
| trans-1,2-Dichloroethene | 20.0 | 21.0 | | ug/L | | 105 | 75 - 124 |
| Trichloroethene | 20.0 | 19.1 | | ug/L | | 96 | 70 - 122 |
| Vinyl chloride | 20.0 | 16.4 | | ug/L | | 82 | 60 - 144 |

| Surrogate | LCS | LCS | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 117 | | 62 - 137 |
| 4-Bromofluorobenzene (Surr) | 102 | | 56 - 136 |
| Toluene-d8 (Surr) | 101 | | 78 - 122 |
| Dibromofluoromethane (Surr) | 114 | | 73 - 120 |

Lab Sample ID: 240-190100-H-10 MS
Matrix: Water
Analysis Batch: 584910

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

| Analyte | Sample | Sample | Spike Added | MS | MS | Unit | D | %Rec | %Rec Limits |
|--------------------------|--------|-----------|-------------|--------|-----------|------|---|------|-------------|
| | Result | Qualifier | | Result | Qualifier | | | | |
| cis-1,2-Dichloroethene | 1.0 | U | 20.0 | 17.1 | | ug/L | | 86 | 66 - 128 |
| trans-1,2-Dichloroethene | 1.0 | U | 20.0 | 16.5 | | ug/L | | 82 | 56 - 136 |
| Trichloroethene | 1.0 | U | 20.0 | 13.8 | | ug/L | | 69 | 61 - 124 |
| Vinyl chloride | 1.0 | U | 20.0 | 16.0 | | ug/L | | 80 | 43 - 157 |

| Surrogate | MS | MS | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 116 | | 62 - 137 |
| 4-Bromofluorobenzene (Surr) | 99 | | 56 - 136 |
| Toluene-d8 (Surr) | 101 | | 78 - 122 |
| Dibromofluoromethane (Surr) | 113 | | 73 - 120 |

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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

Lab Sample ID: 240-190100-I-10 MSD

Matrix: Water

Analysis Batch: 584910

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec | RPD | Limit |
|--------------------------|--------|-----------|-------|--------|-----------|------|---|------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | Limits | | |
| cis-1,2-Dichloroethene | 1.0 | U | 20.0 | 17.3 | | ug/L | | 86 | 66 - 128 | 1 | 14 |
| trans-1,2-Dichloroethene | 1.0 | U | 20.0 | 16.3 | | ug/L | | 82 | 56 - 136 | 1 | 15 |
| Trichloroethene | 1.0 | U | 20.0 | 13.8 | | ug/L | | 69 | 61 - 124 | 0 | 15 |
| Vinyl chloride | 1.0 | U | 20.0 | 15.6 | | ug/L | | 78 | 43 - 157 | 3 | 24 |

| Surrogate | MSD | MSD | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 114 | | 62 - 137 |
| 4-Bromofluorobenzene (Surr) | 97 | | 56 - 136 |
| Toluene-d8 (Surr) | 99 | | 78 - 122 |
| Dibromofluoromethane (Surr) | 113 | | 73 - 120 |

Lab Sample ID: MB 240-584983/9

Matrix: Water

Analysis Batch: 584983

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | 0.49 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.46 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |
| trans-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.51 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.44 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |
| Vinyl chloride | 1.0 | U | 1.0 | 0.45 | ug/L | | 08/24/23 09:45 | 08/24/23 09:45 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 116 | | 62 - 137 | | 08/24/23 09:45 | 1 |
| 4-Bromofluorobenzene (Surr) | 97 | | 56 - 136 | | 08/24/23 09:45 | 1 |
| Toluene-d8 (Surr) | 98 | | 78 - 122 | | 08/24/23 09:45 | 1 |
| Dibromofluoromethane (Surr) | 108 | | 73 - 120 | | 08/24/23 09:45 | 1 |

Lab Sample ID: LCS 240-584983/5

Matrix: Water

Analysis Batch: 584983

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS | LCS | Unit | D | %Rec | %Rec |
|--------------------------|-------------|--------|-----------|------|---|------|----------|
| | | Result | Qualifier | | | | Limits |
| 1,1-Dichloroethene | 20.0 | 24.0 | | ug/L | | 120 | 63 - 134 |
| cis-1,2-Dichloroethene | 20.0 | 20.7 | | ug/L | | 103 | 77 - 123 |
| Tetrachloroethene | 20.0 | 19.5 | | ug/L | | 98 | 76 - 123 |
| trans-1,2-Dichloroethene | 20.0 | 22.0 | | ug/L | | 110 | 75 - 124 |
| Trichloroethene | 20.0 | 19.7 | | ug/L | | 99 | 70 - 122 |
| Vinyl chloride | 20.0 | 17.8 | | ug/L | | 89 | 60 - 144 |

| Surrogate | LCS | LCS | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 62 - 137 |
| 4-Bromofluorobenzene (Surr) | 98 | | 56 - 136 |
| Toluene-d8 (Surr) | 99 | | 78 - 122 |
| Dibromofluoromethane (Surr) | 107 | | 73 - 120 |

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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

Lab Sample ID: MB 240-585005/7
Matrix: Water
Analysis Batch: 585005

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 | | | 08/24/23 10:37 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 66 - 120 | | | | | 08/24/23 10:37 | 1 |

Lab Sample ID: LCS 240-585005/5
Matrix: Water
Analysis Batch: 585005

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|------------------------------|---------------|---------------|---------------|------|---|------|-------------|
| 1,4-Dioxane | 10.0 | 10.3 | | ug/L | | 103 | 80 - 122 |
| Surrogate | LCS %Recovery | LCS Qualifier | Limits | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 66 - 120 | | | | |

Lab Sample ID: 240-190226-C-2 MS
Matrix: Water
Analysis Batch: 585005

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 | 2.5 | | 10.0 | 12.5 | | ug/L | | 100 | 51 - 153 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 109 | | 66 - 120 | | | | | | |

Lab Sample ID: 240-190226-C-2 MSD
Matrix: Water
Analysis Batch: 585005

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 | 2.5 | | 10.0 | 12.3 | | ug/L | | 98 | 51 - 153 | 1 | 16 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 66 - 120 | | | | | | | | |

Lab Sample ID: MB 240-585153/7
Matrix: Water
Analysis Batch: 585153

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 | | | 08/25/23 12:00 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 108 | | 66 - 120 | | | | | 08/25/23 12:00 | 1 |

Eurofins Cleveland

QC Sample Results

Client: ARCADIS US Inc
Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

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

Lab Sample ID: LCS 240-585153/5

Matrix: Water

Analysis Batch: 585153

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 | 9.06 | | ug/L | | 91 | 80 - 122 |
| Surrogate | %Recovery | LCS Qualifier | Limits | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 66 - 120 | | | | |

Lab Sample ID: 240-190229-C-3 MS

Matrix: Water

Analysis Batch: 585153

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 | 10.2 | | ug/L | | 102 | 51 - 153 |
| Surrogate | %Recovery | MS Qualifier | Limits | | | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 111 | | 66 - 120 | | | | | | |

Lab Sample ID: 240-190229-C-3 MSD

Matrix: Water

Analysis Batch: 585153

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 | Limit |
|------------------------------|------------------|----------------------|---------------|------------|---------------|------|---|------|-------------|-----|-------|
| 1,4-Dioxane | 2.0 | U | 10.0 | 10.6 | | ug/L | | 106 | 51 - 153 | 4 | 16 |
| Surrogate | %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1,2-Dichloroethane-d4 (Surr) | 111 | | 66 - 120 | | | | | | | | |

QC Association Summary

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

GC/MS VOA

Analysis Batch: 584910

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 240-190326-1 | TRIP BLANK_68 | Total/NA | Water | 8260D | |
| MB 240-584910/9 | Method Blank | Total/NA | Water | 8260D | |
| LCS 240-584910/5 | Lab Control Sample | Total/NA | Water | 8260D | |
| 240-190100-H-10 MS | Matrix Spike | Total/NA | Water | 8260D | |
| 240-190100-I-10 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260D | |

Analysis Batch: 584983

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 240-190326-2 | MW-208S_081523 | Total/NA | Water | 8260D | |
| 240-190326-3 | MW-209S_081523 | Total/NA | Water | 8260D | |
| 240-190326-4 | MW-210S_081523 | Total/NA | Water | 8260D | |
| MB 240-584983/9 | Method Blank | Total/NA | Water | 8260D | |
| LCS 240-584983/5 | Lab Control Sample | Total/NA | Water | 8260D | |

Analysis Batch: 585005

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 240-190326-2 | MW-208S_081523 | Total/NA | Water | 8260D SIM | |
| 240-190326-3 | MW-209S_081523 | Total/NA | Water | 8260D SIM | |
| MB 240-585005/7 | Method Blank | Total/NA | Water | 8260D SIM | |
| LCS 240-585005/5 | Lab Control Sample | Total/NA | Water | 8260D SIM | |
| 240-190226-C-2 MS | Matrix Spike | Total/NA | Water | 8260D SIM | |
| 240-190226-C-2 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260D SIM | |

Analysis Batch: 585153

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 240-190326-4 | MW-210S_081523 | Total/NA | Water | 8260D SIM | |
| MB 240-585153/7 | Method Blank | Total/NA | Water | 8260D SIM | |
| LCS 240-585153/5 | Lab Control Sample | Total/NA | Water | 8260D SIM | |
| 240-190229-C-3 MS | Matrix Spike | Total/NA | Water | 8260D SIM | |
| 240-190229-C-3 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260D SIM | |

Lab Chronicle

Client: ARCADIS US Inc
 Project/Site: Ford LTP - On Site

Job ID: 240-190326-1

Client Sample ID: TRIP BLANK_68

Lab Sample ID: 240-190326-1

Date Collected: 08/15/23 00:00

Matrix: Water

Date Received: 08/17/23 17:37

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA | Analysis | 8260D | | 1 | 584910 | AJS | EET CLE | 08/23/23 21:31 |

Client Sample ID: MW-208S_081523

Lab Sample ID: 240-190326-2

Date Collected: 08/15/23 13:20

Matrix: Water

Date Received: 08/17/23 17:37

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA | Analysis | 8260D | | 1 | 584983 | AJS | EET CLE | 08/24/23 12:00 |
| Total/NA | Analysis | 8260D SIM | | 1 | 585005 | MRL | EET CLE | 08/24/23 17:45 |

Client Sample ID: MW-209S_081523

Lab Sample ID: 240-190326-3

Date Collected: 08/15/23 14:45

Matrix: Water

Date Received: 08/17/23 17:37

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA | Analysis | 8260D | | 1 | 584983 | AJS | EET CLE | 08/24/23 12:26 |
| Total/NA | Analysis | 8260D SIM | | 1 | 585005 | MRL | EET CLE | 08/24/23 18:09 |

Client Sample ID: MW-210S_081523

Lab Sample ID: 240-190326-4

Date Collected: 08/15/23 11:50

Matrix: Water

Date Received: 08/17/23 17:37

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA | Analysis | 8260D | | 1 | 584983 | AJS | EET CLE | 08/24/23 12:51 |
| Total/NA | Analysis | 8260D SIM | | 1 | 585153 | MRL | EET CLE | 08/25/23 14:55 |

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 - On Site

Job ID: 240-190326-1

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 |
|-----------------------|---------|-----------------------|-----------------|
| California | State | 2927 | 02-27-24 |
| Georgia | State | 4062 | 02-27-24 |
| Illinois | NELAP | 200004 | 07-31-24 |
| Iowa | State | 421 | 06-01-25 |
| Kentucky (UST) | State | 112225 | 02-28-24 |
| Kentucky (WW) | State | KY98016 | 12-31-23 |
| Michigan | State | 9135 | 02-27-24 |
| Minnesota | NELAP | 039-999-348 | 12-31-23 |
| Minnesota (Petrofund) | State | 3506 | 08-01-23 * |
| New Jersey | NELAP | OH001 | 07-01-24 |
| New York | NELAP | 10975 | 04-02-24 |
| Ohio | State | 8303 | 02-27-24 |
| Ohio VAP | State | ORELAP 4062 | 02-27-24 |
| Oregon | NELAP | 4062 | 02-27-24 |
| Pennsylvania | NELAP | 68-00340 | 08-31-24 |
| Texas | NELAP | T104704517-22-19 | 08-31-23 |
| Virginia | NELAP | 460175 | 09-14-23 |
| West Virginia DEP | State | 210 | 12-31-23 |

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



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Eurofins - Cleveland Sample Receipt Form/Narrative Barberton Facility Login # : _____

Client Arcadis Site Name _____ Cooler unpacked by: [Signature]
Cooler Received on 8-17-23 Opened on 8-17-23
FedEx: 1st Grd Exp UPS FAS Waypoint 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: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # 22 (CF _____ °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 0.3 °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? Yes No NA
 - Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 - Were tamper/custody seals intact and uncompromised? Yes No NA
- 3. Shippers' packing slip attached to the cooler(s)? Yes No
- 4. Did custody papers accompany the sample(s)? Yes No
- 5. Were the custody papers relinquished & signed in the appropriate place? Yes No
- 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- 7. Did all bottles arrive in good condition (Unbroken)? Yes No
- 8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- 9. For each sample, does the COC specify preservatives 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? Yes No
- 11. Sufficient quantity received to perform indicated analyses? Yes No
- 12. Are these work share samples and all listed on the COC? Yes No
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# HC312502
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
- 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0041301I Yes No
- 17. Was a LL Hg or Me Hg trip blank present? Yes No

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

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: _____

DATA VERIFICATION REPORT



August 29, 2023

Kris Hinskey
Arcadis of Michigan
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: 30167538.401.03- onsite groundwater

Event Specific Scope of Work References: Sample COC

Laboratory: Eurofins Environment Testing LLC - Cleveland

Laboratory submittal: 190326-1

Sample date: 2023-08-15

Report received by CADENA: 2023-08-29

Initial Data Verification completed by CADENA: 2023-08-29

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.

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch MS/MSD issues 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: 190326-1

| Analyte | Cas No. | Sample Name: TRIP BLANK_68 | | | | MW-208S_081523 | | | | MW-209S_081523 | | | | MW-210S_081523 | | | |
|---------|---------|----------------------------|-------|-------|-----------------|----------------|-------|-------|-----------------|----------------|-------|-------|-----------------|----------------|-------|-------|-----------------|
| | | Result | Limit | Units | Valid Qualifier | Result | Limit | Units | Valid Qualifier | Result | Limit | Units | Valid Qualifier | Result | Limit | Units | Valid Qualifier |
| | | Lab Sample ID: 2401903261 | | | | 2401903262 | | | | 2401903263 | | | | 2401903264 | | | |
| | | Sample Date: 8/15/2023 | | | | 8/15/2023 | | | | 8/15/2023 | | | | 8/15/2023 | | | |

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 | --- | ND | 1.0 | ug/l | --- | 16 | 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 | --- | 2.1 | 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 | --- | 0.79 | 1.0 | ug/l | J | 3.6 | 1.0 | ug/l | --- |

OSW-8260DSIM

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