

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Lauren Dolginko  
Roux Environmental Eng & Geology DPC  
209 Shafter St  
Islandia, New York 11749

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## JOB DESCRIPTION

2828 W 28th Street

## JOB NUMBER

460-311364-1

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## Job Notes

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## Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

## Authorization



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## Definitions/Glossary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

### Qualifiers

#### LCMS

| Qualifier | Qualifier Description                                  |
|-----------|--------------------------------------------------------|
| *         | Isotope Dilution analyte is outside acceptance limits. |
| J         | Indicates an estimated value.                          |
| U         | 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: Roux Environmental Eng & Geology DPC  
Project: 2828 W 28th Street

Job ID: 460-311364-1

**Job ID: 460-311364-1**

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### Job Narrative 460-311364-1

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 9/14/2024 7:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3°C and 1.4°C.

#### Method 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Samples RXMW-1\_P (460-311364-1), RXMW-5\_P (460-311364-2) and FB\_09132024\_P (460-311364-3) were analyzed for Per- and Polyfluoroalkyl Substances by LC/MS/MS. The samples were prepared on 9/18/2024 and analyzed on 9/19/2024.

The low level continuing calibration verification (CCVL) and continuing calibration verification (CCV) associated with batch 240-627555 recovered outside of control limits for IDA compound(s). Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: FB\_09132024\_P (460-311364-3). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Ion abundance ratios are outside criteria for the following sample: RXMW-5\_P (460-311364-2). Quantitation is based on the theoretical ion abundance ratio; therefore, these analytes have been reported as an estimated maximum possible concentration (EMPC). The affected analytes have been flagged.

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## Detection Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

### Client Sample ID: RXMW-1\_P

Lab Sample ID: 460-311364-1

| Analyte                                        | Result | Qualifier | RL   | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|------------------------------------------------|--------|-----------|------|------|------|---------|---|--------|-----------|
| Perfluorobutanoic acid (PFBA)                  | 11.3   |           | 6.25 | 1.67 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoropentanoic acid (PFPeA)                | 7.35   |           | 3.13 | 0.78 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorohexanoic acid (PFHxA)                 | 11.4   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoroheptanoic acid (PFHpA)                | 10.5   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorooctanoic acid (PFOA)                  | 377    |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorononanoic acid (PFNA)                  | 4.78   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorobutanesulfonic acid (PFBS)            | 6.61   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorohexanesulfonic acid (PFHxS)           | 7.67   |           | 1.56 | 0.40 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoroheptanesulfonic acid (PFHpS)          | 0.81   | J         | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorooctanesulfonic acid (PFOS)            | 15.6   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 3.01   | J         | 6.25 | 1.56 | ng/L | 1       |   | 1633   | Total/NA  |

### Client Sample ID: RXMW-5\_P

Lab Sample ID: 460-311364-2

| Analyte                               | Result | Qualifier | RL   | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|---------------------------------------|--------|-----------|------|------|------|---------|---|--------|-----------|
| Perfluorobutanoic acid (PFBA)         | 2.66   | J         | 6.24 | 1.66 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoropentanoic acid (PFPeA)       | 1.65   | J         | 3.12 | 0.78 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorohexanoic acid (PFHxA)        | 2.43   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoroheptanoic acid (PFHpA)       | 1.93   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorooctanoic acid (PFOA)         | 27.9   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorononanoic acid (PFNA)         | 2.33   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorobutanesulfonic acid (PFBS)   | 3.56   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorohexanesulfonic acid (PFHxS)  | 3.09   |           | 1.56 | 0.40 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluoroheptanesulfonic acid (PFHpS) | 2.33   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |
| Perfluorooctanesulfonic acid (PFOS)   | 32.9   |           | 1.56 | 0.39 | ng/L | 1       |   | 1633   | Total/NA  |

### Client Sample ID: FB\_09132024\_P

Lab Sample ID: 460-311364-3

No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: RXMW-1\_P

Lab Sample ID: 460-311364-1

Date Collected: 09/13/24 12:05

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

| Analyte                                                  | Result | Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                            | 11.3   |           | 6.25 | 1.67 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoropentanoic acid (PFPeA)                          | 7.35   |           | 3.13 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorohexanoic acid (PFHxA)                           | 11.4   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoroheptanoic acid (PFHpA)                          | 10.5   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorooctanoic acid (PFOA)                            | 377    |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorononanoic acid (PFNA)                            | 4.78   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorodecanoic acid (PFDA)                            | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoroundecanoic acid (PFUnA)                         | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorododecanoic acid (PFDoA)                         | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorotridecanoic acid (PFTrDA)                       | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorotetradecanoic acid (PFTeDA)                     | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                      | 6.61   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoropentanesulfonic acid (PFPeS)                    | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                     | 7.67   |           | 1.56 | 0.40 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 0.81   | J         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                      | 15.6   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorononanesulfonic acid (PFNS)                      | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorododecanesulfonic acid (PFDoS)                   | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorooctanesulfonamide (PFOSA)                       | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 1.56   | U         | 1.56 | 0.48 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 1.56   | U         | 1.56 | 0.41 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 15.6   | U         | 15.6 | 3.91 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 15.6   | U         | 15.6 | 3.91 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 3.01   | J         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)              | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 3.13   | U         | 3.13 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)               | 3.13   | U         | 3.13 | 0.95 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 6.25   | U         | 6.25 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: RXMW-1\_P

Lab Sample ID: 460-311364-1

Date Collected: 09/13/24 12:05

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

| Analyte                                           | Result | Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------------------------------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA) | 3.13   | U         | 3.13 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA)        | 7.82   | U         | 7.82 | 1.95 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA)        | 39.1   | U         | 39.1 | 9.77 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA)        | 39.1   | U         | 39.1 | 11.6 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluorodecanesulfonic acid (PFDS)               | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| Perfluoro-3-methoxypropanoic acid (PFMPA)         | 3.13   | U         | 3.13 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:33 | 1       |

| Isotope Dilution | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C4 PFBA        | 94.9      |           | 10 - 130 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C5 PFPeA       | 91.4      |           | 35 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C5 PFHxA       | 75.7      |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C4 PFHpA       | 85.0      |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C8 PFOA        | 83.3      |           | 60 - 140 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C9 PFNA        | 106       |           | 55 - 140 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C6 PFDA        | 119       |           | 50 - 140 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C7 PFUnA       | 108       |           | 30 - 140 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C2 PFTeDA      | 85.3      |           | 10 - 130 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C3 PFBS        | 112       |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C3 PFHxS       | 107       |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C8 PFOS        | 112       |           | 45 - 140 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C8 FOSA        | 105       |           | 30 - 130 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d3-NMeFOSAA      | 105       |           | 45 - 200 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d5-NEtFOSAA      | 113       |           | 10 - 200 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| M2-4:2 FTS       | 149       |           | 60 - 200 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| M2-6:2 FTS       | 141       |           | 60 - 200 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| M2-8:2 FTS       | 132       |           | 50 - 200 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C3 HFPO-DA     | 80.8      |           | 25 - 160 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d7-N-MeFOSE-M    | 98.8      |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d9-N-EtFOSE-M    | 89.5      |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d5-NEtPFOSA      | 71.0      |           | 10 - 130 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| d3-NMePFOSA      | 80.6      |           | 15 - 130 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |
| 13C2-PFDoDA      | 105       |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 00:33 | 1       |

Client Sample ID: RXMW-5\_P

Lab Sample ID: 460-311364-2

Date Collected: 09/13/24 13:30

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

| Analyte                          | Result | Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)    | 2.66   | J         | 6.24 | 1.66 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoropentanoic acid (PFPeA)  | 1.65   | J         | 3.12 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorohexanoic acid (PFHxA)   | 2.43   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoroheptanoic acid (PFHpA)  | 1.93   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorooctanoic acid (PFOA)    | 27.9   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorononanoic acid (PFNA)    | 2.33   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorodecanoic acid (PFDA)    | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoroundecanoic acid (PFUnA) | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: RXMW-5\_P

Lab Sample ID: 460-311364-2

Date Collected: 09/13/24 13:30

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

| Analyte                                                  | Result | Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluorododecanoic acid (PFDoA)                         | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorotridecanoic acid (PFTrDA)                       | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorotetradecanoic acid (PFTeDA)                     | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                      | 3.56   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoropentanesulfonic acid (PFPeS)                    | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                     | 3.09   |           | 1.56 | 0.40 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 2.33   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                      | 32.9   |           | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorononanesulfonic acid (PFNS)                      | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorododecanesulfonic acid (PFDoS)                   | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorooctanesulfonamide (PFOSA)                       | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 1.56   | U         | 1.56 | 0.48 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 1.56   | U         | 1.56 | 0.41 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 15.6   | U         | 15.6 | 3.90 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 15.6   | U         | 15.6 | 3.90 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 4,8-Dioxo-3H-perfluorononanoic acid (ADONA)              | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 3.12   | U         | 3.12 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)               | 3.12   | U         | 3.12 | 0.95 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 6.24   | U         | 6.24 | 1.56 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)        | 3.12   | U         | 3.12 | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA)               | 7.80   | U         | 7.80 | 1.95 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA)               | 39.0   | U         | 39.0 | 9.75 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA)               | 39.0   | U         | 39.0 | 11.6 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                      | 1.56   | U         | 1.56 | 0.39 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: RXMW-5\_P

Lab Sample ID: 460-311364-2

Date Collected: 09/13/24 13:30

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

| Analyte                                   | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 3.12      | U         | 3.12     | 0.78 | ng/L |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| Isotope Dilution                          | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                 | 98.7      |           | 10 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C5 PFPeA                                | 99.6      |           | 35 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C5 PFHxA                                | 85.5      |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C4 PFHpA                                | 97.7      |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C8 PFOA                                 | 88.3      |           | 60 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C9 PFNA                                 | 109       |           | 55 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C6 PFDA                                 | 107       |           | 50 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C7 PFUnA                                | 101       |           | 30 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C2 PFTeDA                               | 78.2      |           | 10 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C3 PFBS                                 | 121       |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C3 PFHxS                                | 111       |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C8 PFOS                                 | 115       |           | 45 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C8 FOSA                                 | 109       |           | 30 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d3-NMeFOSAA                               | 103       |           | 45 - 200 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d5-NEtFOSAA                               | 107       |           | 10 - 200 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| M2-4:2 FTS                                | 142       |           | 60 - 200 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| M2-6:2 FTS                                | 149       |           | 60 - 200 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| M2-8:2 FTS                                | 142       |           | 50 - 200 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C3 HFPO-DA                              | 84.9      |           | 25 - 160 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d7-N-MeFOSE-M                             | 102       |           | 10 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d9-N-EtFOSE-M                             | 91.9      |           | 10 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d5-NEtPFOSA                               | 71.3      |           | 10 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| d3-NMePFOSA                               | 80.0      |           | 15 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |
| 13C2-PFDoDA                               | 93.5      |           | 10 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 00:47 | 1       |

Client Sample ID: FB\_09132024\_P

Lab Sample ID: 460-311364-3

Date Collected: 09/13/24 12:20

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

| Analyte                               | Result | Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)         | 6.75   | U         | 6.75 | 1.80 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoropentanoic acid (PFPeA)       | 3.38   | U         | 3.38 | 0.84 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorohexanoic acid (PFHxA)        | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoroheptanoic acid (PFHpA)       | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorooctanoic acid (PFOA)         | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorononanoic acid (PFNA)         | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorodecanoic acid (PFDA)         | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoroundecanoic acid (PFUnA)      | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorododecanoic acid (PFDoA)      | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorotridecanoic acid (PFTriDA)   | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorotetradecanoic acid (PFTeDA)  | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorobutanesulfonic acid (PFBS)   | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoropentanesulfonic acid (PFPeS) | 1.69   | U         | 1.69 | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)  | 1.69   | U         | 1.69 | 0.44 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: FB\_09132024\_P

Lab Sample ID: 460-311364-3

Date Collected: 09/13/24 12:20

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

| Analyte                                                  | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluoroheptanesulfonic acid (PFHpS)                    | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                      | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorononanesulfonic acid (PFNS)                      | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorodecanesulfonic acid (PFDoS)                     | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorooctanesulfonamide (PFOSA)                       | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 1.69      | U         | 1.69     | 0.52 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 1.69      | U         | 1.69     | 0.44 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 16.9      | U         | 16.9     | 4.22 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 16.9      | U         | 16.9     | 4.22 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 4,8-Dioxo-3H-perfluorononanoic acid (ADONA)              | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 3.38      | U         | 3.38     | 0.84 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Nonafluoro-3,6-dioxahexanoic acid (NFDHA)                | 3.38      | U         | 3.38     | 1.03 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 6.75      | U         | 6.75     | 1.69 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)        | 3.38      | U         | 3.38     | 0.84 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA)               | 8.44      | U         | 8.44     | 2.11 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA)               | 42.2      | U         | 42.2     | 10.6 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA)               | 42.2      | U         | 42.2     | 12.6 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                      | 1.69      | U         | 1.69     | 0.42 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Perfluoro-3-methoxypropanoic acid (PFMPA)                | 3.38      | U         | 3.38     | 0.84 | ng/L |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| Isotope Dilution                                         | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                                | 124       |           | 10 - 130 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C5 PFPeA                                               | 109       |           | 35 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C5 PFHxA                                               | 101       |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C4 PFHpA                                               | 110       |           | 55 - 150 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C8 PFOA                                                | 113       |           | 60 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C9 PFNA                                                | 129       |           | 55 - 140 |      |      |   | 09/18/24 10:06 | 09/19/24 01:00 | 1       |

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# Client Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: FB\_09132024\_P

Lab Sample ID: 460-311364-3

Date Collected: 09/13/24 12:20

Matrix: Water

Date Received: 09/14/24 19:15

## Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C6 PFDA        | 141       | *         | 50 - 140 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C7 PFUnA       | 133       |           | 30 - 140 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C2 PFTeDA      | 92.9      |           | 10 - 130 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C3 PFBS        | 132       |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C3 PFHxS       | 130       |           | 55 - 150 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C8 PFOS        | 134       |           | 45 - 140 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C8 FOSA        | 140       | *         | 30 - 130 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d3-NMeFOSAA      | 137       |           | 45 - 200 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d5-NEtFOSAA      | 144       |           | 10 - 200 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| M2-4:2 FTS       | 202       | *         | 60 - 200 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| M2-6:2 FTS       | 186       |           | 60 - 200 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| M2-8:2 FTS       | 178       |           | 50 - 200 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C3 HFPO-DA     | 107       |           | 25 - 160 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d7-N-MeFOSE-M    | 131       |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d9-N-EtFOSE-M    | 122       |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d5-NEtPFOSA      | 95.9      |           | 10 - 130 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| d3-NMePFOSA      | 105       |           | 15 - 130 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |
| 13C2-PFDoDA      | 113       |           | 10 - 150 | 09/18/24 10:06 | 09/19/24 01:00 | 1       |

# Isotope Dilution Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

|                   |                  | Percent Isotope Dilution Recovery (Acceptance Limits) |                   |                     |                    |                    |                    |                    |                     |
|-------------------|------------------|-------------------------------------------------------|-------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Lab Sample ID     | Client Sample ID | PFBA<br>(10-130)                                      | PFPeA<br>(35-150) | 13C5PHA<br>(55-150) | C4PFHA<br>(55-150) | C8PFOA<br>(60-140) | C9PFNA<br>(55-140) | C6PFDA<br>(50-140) | 13C7PUA<br>(30-140) |
| 460-311364-1      | RXMW-1_P         | 94.9                                                  | 91.4              | 75.7                | 85.0               | 83.3               | 106                | 119                | 108                 |
| 460-311364-2      | RXMW-5_P         | 98.7                                                  | 99.6              | 85.5                | 97.7               | 88.3               | 109                | 107                | 101                 |
| 460-311364-2 DU   | RXMW-5_P         | 104                                                   | 105               | 86.5                | 104                | 91.7               | 120                | 116                | 108                 |
| 460-311364-3      | FB_09132024_P    | 124                                                   | 109               | 101                 | 110                | 113                | 129                | 141 *              | 133                 |
| MB 240-627485/1-A | Method Blank     | 98.6                                                  | 93.7              | 86.5                | 89.9               | 91.7               | 107                | 113                | 105                 |

|                   |                  | Percent Isotope Dilution Recovery (Acceptance Limits) |                    |                    |                    |                   |                     |                     |                     |
|-------------------|------------------|-------------------------------------------------------|--------------------|--------------------|--------------------|-------------------|---------------------|---------------------|---------------------|
| Lab Sample ID     | Client Sample ID | PFTDA<br>(10-130)                                     | C3PFBS<br>(55-150) | C3PFHS<br>(55-150) | C8PFOS<br>(45-140) | PFOSA<br>(30-130) | d3NMFOS<br>(45-200) | d5NEFOS<br>(10-200) | M242FTS<br>(60-200) |
| 460-311364-1      | RXMW-1_P         | 85.3                                                  | 112                | 107                | 112                | 105               | 105                 | 113                 | 149                 |
| 460-311364-2      | RXMW-5_P         | 78.2                                                  | 121                | 111                | 115                | 109               | 103                 | 107                 | 142                 |
| 460-311364-2 DU   | RXMW-5_P         | 80.4                                                  | 136                | 118                | 120                | 111               | 108                 | 114                 | 155                 |
| 460-311364-3      | FB_09132024_P    | 92.9                                                  | 132                | 130                | 134                | 140 *             | 137                 | 144                 | 202 *               |
| MB 240-627485/1-A | Method Blank     | 74.1                                                  | 109                | 107                | 116                | 113               | 110                 | 122                 | 158                 |

|                   |                  | Percent Isotope Dilution Recovery (Acceptance Limits) |                     |                    |                  |                  |                     |                     |                    |
|-------------------|------------------|-------------------------------------------------------|---------------------|--------------------|------------------|------------------|---------------------|---------------------|--------------------|
| Lab Sample ID     | Client Sample ID | M262FTS<br>(60-200)                                   | M282FTS<br>(50-200) | HFPODA<br>(25-160) | NMFM<br>(10-150) | NEFM<br>(10-150) | d5NPFSA<br>(10-130) | d3NMFSA<br>(15-130) | PFDODA<br>(10-150) |
| 460-311364-1      | RXMW-1_P         | 141                                                   | 132                 | 80.8               | 98.8             | 89.5             | 71.0                | 80.6                | 105                |
| 460-311364-2      | RXMW-5_P         | 149                                                   | 142                 | 84.9               | 102              | 91.9             | 71.3                | 80.0                | 93.5               |
| 460-311364-2 DU   | RXMW-5_P         | 151                                                   | 150                 | 87.3               | 107              | 88.8             | 75.6                | 79.8                | 107                |
| 460-311364-3      | FB_09132024_P    | 186                                                   | 178                 | 107                | 131              | 122              | 95.9                | 105                 | 113                |
| MB 240-627485/1-A | Method Blank     | 150                                                   | 143                 | 91.6               | 112              | 92.5             | 76.6                | 79.1                | 96.6               |

### Surrogate Legend

PFBA = 13C4 PFBA  
PFPeA = 13C5 PFPeA  
13C5PHA = 13C5 PFHxA  
C4PFHA = 13C4 PFHpA  
C8PFOA = 13C8 PFOA  
C9PFNA = 13C9 PFNA  
C6PFDA = 13C6 PFDA  
13C7PUA = 13C7 PFUnA  
PFTDA = 13C2 PFTeDA  
C3PFBS = 13C3 PFBS  
C3PFHS = 13C3 PFHxS  
C8PFOS = 13C8 PFOS  
PFOSA = 13C8 FOSA  
d3NMFOS = d3-NMeFOSAA  
d5NEFOS = d5-NEtFOSAA  
M242FTS = M2-4:2 FTS  
M262FTS = M2-6:2 FTS  
M282FTS = M2-8:2 FTS  
HFPODA = 13C3 HFPO-DA  
NMFM = d7-N-MeFOSE-M  
NEFM = d9-N-EtFOSE-M  
d5NPFSA = d5-NEtPFOSA  
d3NMFSA = d3-NMePFOSA  
PFDODA = 13C2-PFDODA

# Isotope Dilution Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

|                       |                    | Percent Isotope Dilution Recovery (Acceptance Limits) |                     |                     |                    |                    |                     |                     |                     |
|-----------------------|--------------------|-------------------------------------------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Lab Sample ID         | Client Sample ID   | PFBA<br>(10-130)                                      | PFPeA<br>(40-150)   | 13C5PHA<br>(40-150) | C4PFHA<br>(40-150) | C8PFOA<br>(30-140) | C9PFNA<br>(30-140)  | C6PFDA<br>(20-140)  | 13C7PUA<br>(20-140) |
| LCS 240-627485/3-A    | Lab Control Sample | 91.1                                                  | 84.1                | 79.2                | 81.5               | 83.9               | 103                 | 107                 | 96.0                |
| LLCS 240-627485/2-A   | Lab Control Sample | 91.4                                                  | 81.5                | 77.5                | 81.6               | 86.5               | 97.1                | 110                 | 100                 |
|                       |                    | Percent Isotope Dilution Recovery (Acceptance Limits) |                     |                     |                    |                    |                     |                     |                     |
| Lab Sample ID         | Client Sample ID   | PFTDA<br>(10-130)                                     | C3PFBS<br>(25-150)  | C3PFHS<br>(25-150)  | C8PFOS<br>(20-140) | PFOSA<br>(10-130)  | d3NMFOS<br>(10-200) | d5NEFOS<br>(10-200) | M242FTS<br>(25-200) |
| LCS 240-627485/3-A    | Lab Control Sample | 72.2                                                  | 97.3                | 101                 | 106                | 98.0               | 107                 | 108                 | 137                 |
| LLCS 240-627485/2-A   | Lab Control Sample | 73.2                                                  | 103                 | 96.8                | 104                | 103                | 108                 | 115                 | 142                 |
|                       |                    | Percent Isotope Dilution Recovery (Acceptance Limits) |                     |                     |                    |                    |                     |                     |                     |
| Lab Sample ID         | Client Sample ID   | M262FTS<br>(25-200)                                   | M282FTS<br>(25-200) | HFPODA<br>(25-160)  | NMFM<br>(10-150)   | NEFM<br>(10-150)   | d5NPFSA<br>(10-130) | d3NMFSA<br>(10-130) | PFDODA<br>(10-150)  |
| LCS 240-627485/3-A    | Lab Control Sample | 125                                                   | 126                 | 84.7                | 97.4               | 86.5               | 69.8                | 75.3                | 93.7                |
| LLCS 240-627485/2-A   | Lab Control Sample | 138                                                   | 124                 | 77.2                | 100                | 95.8               | 73.2                | 75.3                | 92.4                |
| Surrogate Legend      |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| PFBA = 13C4 PFBA      |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| PFPeA = 13C5 PFPeA    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| 13C5PHA = 13C5 PFHxA  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C4PFHA = 13C4 PFHpA   |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C8PFOA = 13C8 PFOA    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C9PFNA = 13C9 PFNA    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C6PFDA = 13C6 PFDA    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| 13C7PUA = 13C7 PFUnA  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| PFTDA = 13C2 PFTeDA   |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C3PFBS = 13C3 PFBS    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C3PFHS = 13C3 PFHxS   |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| C8PFOS = 13C8 PFOS    |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| PFOSA = 13C8 FOSA     |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| d3NMFOS = d3-NMeFOSAA |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| d5NEFOS = d5-NEtFOSAA |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| M242FTS = M2-4:2 FTS  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| M262FTS = M2-6:2 FTS  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| M282FTS = M2-8:2 FTS  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| HFPODA = 13C3 HFPO-DA |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| NMFM = d7-N-MeFOSE-M  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| NEFM = d9-N-EtFOSE-M  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| d5NPFSA = d5-NEtPFOSA |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| d3NMFSA = d3-NMePFOSA |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |
| PFDODA = 13C2-PFDODA  |                    |                                                       |                     |                     |                    |                    |                     |                     |                     |

# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-627485/1-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                                  | MB<br>Result | MB<br>Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------------|--------------|-----------------|------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                            | 8.00         | U               | 8.00 | 2.13 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoropentanoic acid (PFPeA)                          | 4.00         | U               | 4.00 | 1.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorohexanoic acid (PFHxA)                           | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoroheptanoic acid (PFHpA)                          | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorooctanoic acid (PFOA)                            | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorononanoic acid (PFNA)                            | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorodecanoic acid (PFDA)                            | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoroundecanoic acid (PFUnA)                         | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorododecanoic acid (PFDoA)                         | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorotridecanoic acid (PFTriDA)                      | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorotetradecanoic acid (PFTeDA)                     | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                      | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoropentanesulfonic acid (PFPeS)                    | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                     | 2.00         | U               | 2.00 | 0.52 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                      | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorononanesulfonic acid (PFNS)                      | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorododecanesulfonic acid (PFDoS)                   | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorooctanesulfonamide (PFOSA)                       | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 2.00         | U               | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 2.00         | U               | 2.00 | 0.62 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 2.00         | U               | 2.00 | 0.52 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 20.0         | U               | 20.0 | 5.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 20.0         | U               | 20.0 | 5.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 4,8-Dioxo-3H-perfluorononanoic acid (ADONA)              | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 4.00         | U               | 4.00 | 1.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Nonafluoro-3,6-dioxahexanoic acid (NFDHA)                | 4.00         | U               | 4.00 | 1.22 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 8.00         | U               | 8.00 | 2.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-627485/1-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                          | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------------------|-----------|--------------|------|------|------|---|----------------|----------------|---------|
| Perfluoro (2-ethoxyethane) sulfonic acid (PFESA) | 4.00      | U            | 4.00 | 1.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA)       | 10.0      | U            | 10.0 | 2.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA)       | 50.0      | U            | 50.0 | 12.5 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA)       | 50.0      | U            | 50.0 | 14.9 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluorodecanesulfonic acid (PFDS)              | 2.00      | U            | 2.00 | 0.50 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| Perfluoro-3-methoxypropanoic acid (PFMPA)        | 4.00      | U            | 4.00 | 1.00 | ng/L |   | 09/18/24 10:06 | 09/18/24 23:52 | 1       |

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|----------------|----------------|---------|
| 13C4 PFBA        | 98.6         |              | 10 - 130 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C5 PFPeA       | 93.7         |              | 35 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C5 PFHxA       | 86.5         |              | 55 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C4 PFHpA       | 89.9         |              | 55 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C8 PFOA        | 91.7         |              | 60 - 140 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C9 PFNA        | 107          |              | 55 - 140 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C6 PFDA        | 113          |              | 50 - 140 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C7 PFUnA       | 105          |              | 30 - 140 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C2 PFTeDA      | 74.1         |              | 10 - 130 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C3 PFBS        | 109          |              | 55 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C3 PFHxS       | 107          |              | 55 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C8 PFOS        | 116          |              | 45 - 140 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C8 FOSA        | 113          |              | 30 - 130 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d3-NMeFOSAA      | 110          |              | 45 - 200 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d5-NEtFOSAA      | 122          |              | 10 - 200 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| M2-4:2 FTS       | 158          |              | 60 - 200 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| M2-6:2 FTS       | 150          |              | 60 - 200 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| M2-8:2 FTS       | 143          |              | 50 - 200 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C3 HFPO-DA     | 91.6         |              | 25 - 160 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d7-N-MeFOSE-M    | 112          |              | 10 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d9-N-EtFOSE-M    | 92.5         |              | 10 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d5-NEtPFOSA      | 76.6         |              | 10 - 130 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| d3-NMePFOSA      | 79.1         |              | 15 - 130 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |
| 13C2-PFDoDA      | 96.6         |              | 10 - 150 | 09/18/24 10:06 | 09/18/24 23:52 | 1       |

Lab Sample ID: LCS 240-627485/3-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                         | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Perfluorobutanoic acid (PFBA)   | 100         | 107.3      |               | ng/L |   | 107  | 58 - 148    |
| Perfluoropentanoic acid (PFPeA) | 50.0        | 53.80      |               | ng/L |   | 108  | 54 - 152    |
| Perfluorohexanoic acid (PFHxA)  | 25.0        | 28.65      |               | ng/L |   | 115  | 55 - 152    |
| Perfluoroheptanoic acid (PFHpA) | 25.0        | 28.18      |               | ng/L |   | 113  | 54 - 154    |
| Perfluorooctanoic acid (PFOA)   | 25.0        | 29.31      |               | ng/L |   | 117  | 52 - 161    |
| Perfluorononanoic acid (PFNA)   | 25.0        | 25.77      |               | ng/L |   | 103  | 59 - 149    |
| Perfluorodecanoic acid (PFDA)   | 25.0        | 26.59      |               | ng/L |   | 106  | 52 - 147    |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-627485/3-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Perfluoroundecanoic acid (PFUnA)                         | 25.0        | 27.26      |               | ng/L |   | 109  | 48 - 159    |
| Perfluorododecanoic acid (PFDoA)                         | 25.0        | 23.56      |               | ng/L |   | 94   | 64 - 142    |
| Perfluorotridecanoic acid (PFTrDA)                       | 25.0        | 23.41      |               | ng/L |   | 94   | 49 - 148    |
| Perfluorotetradecanoic acid (PFTeDA)                     | 25.0        | 26.17      |               | ng/L |   | 105  | 47 - 161    |
| Perfluorobutanesulfonic acid (PFBS)                      | 22.1        | 24.73      |               | ng/L |   | 112  | 62 - 144    |
| Perfluoropentanesulfonic acid (PFPeS)                    | 23.5        | 27.11      |               | ng/L |   | 116  | 59 - 151    |
| Perfluorohexanesulfonic acid (PFHxS)                     | 22.8        | 25.63      |               | ng/L |   | 113  | 57 - 146    |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 23.8        | 25.75      |               | ng/L |   | 108  | 55 - 152    |
| Perfluorooctanesulfonic acid (PFOS)                      | 23.2        | 22.89      |               | ng/L |   | 99   | 58 - 149    |
| Perfluorononanesulfonic acid (PFNS)                      | 24.0        | 23.47      |               | ng/L |   | 98   | 52 - 148    |
| Perfluorododecanesulfonic acid (PFDoS)                   | 24.2        | 17.98      |               | ng/L |   | 74   | 36 - 145    |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 93.4        | 95.35      |               | ng/L |   | 102  | 67 - 146    |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 94.8        | 103.5      |               | ng/L |   | 109  | 61 - 151    |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 95.8        | 100.9      |               | ng/L |   | 105  | 63 - 152    |
| Perfluorooctanesulfonamide (PFOSA)                       | 25.0        | 29.44      |               | ng/L |   | 118  | 61 - 148    |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 25.0        | 29.72      |               | ng/L |   | 119  | 63 - 145    |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 25.0        | 30.74      |               | ng/L |   | 123  | 65 - 139    |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 25.0        | 27.27      |               | ng/L |   | 109  | 58 - 144    |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 25.0        | 25.91      |               | ng/L |   | 104  | 59 - 146    |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 250         | 257.2      |               | ng/L |   | 103  | 71 - 136    |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 250         | 277.1      |               | ng/L |   | 111  | 69 - 137    |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 100         | 101.3      |               | ng/L |   | 101  | 63 - 144    |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)              | 94.2        | 106.4      |               | ng/L |   | 113  | 68 - 146    |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 50.0        | 50.54      |               | ng/L |   | 101  | 55 - 148    |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)               | 50.0        | 61.26      |               | ng/L |   | 123  | 48 - 161    |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 93.2        | 91.23      |               | ng/L |   | 98   | 56 - 156    |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 94.2        | 88.02      |               | ng/L |   | 93   | 46 - 156    |
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)       | 44.5        | 51.10      |               | ng/L |   | 115  | 56 - 151    |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-627485/3-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 125         | 115.7      |               | ng/L |   | 93   | 62 - 129    |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 625         | 537.8      |               | ng/L |   | 86   | 63 - 134    |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 625         | 598.2      |               | ng/L |   | 96   | 50 - 138    |
| Perfluorodecanesulfonic acid (PFDS)        | 24.1        | 23.20      |               | ng/L |   | 96   | 51 - 147    |
| Perfluoro-3-methoxypropanoic acid (PFMPA)  | 50.0        | 50.13      |               | ng/L |   | 100  | 51 - 145    |

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits   |
|------------------|---------------|---------------|----------|
| 13C4 PFBA        | 91.1          |               | 10 - 130 |
| 13C5 PFPeA       | 84.1          |               | 40 - 150 |
| 13C5 PFHxA       | 79.2          |               | 40 - 150 |
| 13C4 PFHpA       | 81.5          |               | 40 - 150 |
| 13C8 PFOA        | 83.9          |               | 30 - 140 |
| 13C9 PFNA        | 103           |               | 30 - 140 |
| 13C6 PFDA        | 107           |               | 20 - 140 |
| 13C7 PFUnA       | 96.0          |               | 20 - 140 |
| 13C2 PFTeDA      | 72.2          |               | 10 - 130 |
| 13C3 PFBS        | 97.3          |               | 25 - 150 |
| 13C3 PFHxS       | 101           |               | 25 - 150 |
| 13C8 PFOS        | 106           |               | 20 - 140 |
| 13C8 FOSA        | 98.0          |               | 10 - 130 |
| d3-NMeFOSAA      | 107           |               | 10 - 200 |
| d5-NEtFOSAA      | 108           |               | 10 - 200 |
| M2-4:2 FTS       | 137           |               | 25 - 200 |
| M2-6:2 FTS       | 125           |               | 25 - 200 |
| M2-8:2 FTS       | 126           |               | 25 - 200 |
| 13C3 HFPO-DA     | 84.7          |               | 25 - 160 |
| d7-N-MeFOSE-M    | 97.4          |               | 10 - 150 |
| d9-N-EtFOSE-M    | 86.5          |               | 10 - 150 |
| d5-NEtPFOSA      | 69.8          |               | 10 - 130 |
| d3-NMePFOSA      | 75.3          |               | 10 - 130 |
| 13C2-PFDoDA      | 93.7          |               | 10 - 150 |

Lab Sample ID: LLCS 240-627485/2-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                         | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------------------------------|-------------|-------------|----------------|------|---|------|-------------|
| Perfluorobutanoic acid (PFBA)   | 8.00        | 8.073       |                | ng/L |   | 101  | 44 - 157    |
| Perfluoropentanoic acid (PFPeA) | 4.00        | 4.221       |                | ng/L |   | 106  | 57 - 148    |
| Perfluorohexanoic acid (PFHxA)  | 2.00        | 2.471       |                | ng/L |   | 124  | 62 - 149    |
| Perfluoroheptanoic acid (PFHpA) | 2.00        | 2.136       |                | ng/L |   | 107  | 56 - 150    |
| Perfluorooctanoic acid (PFOA)   | 2.00        | 2.189       |                | ng/L |   | 109  | 57 - 161    |
| Perfluorononanoic acid (PFNA)   | 2.00        | 2.207       |                | ng/L |   | 110  | 53 - 157    |
| Perfluorodecanoic acid (PFDA)   | 2.00        | 2.360       |                | ng/L |   | 118  | 43 - 158    |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-627485/2-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                                  | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------------------------|-------------|-------------|----------------|------|---|------|-------------|
| Perfluoroundecanoic acid (PFUnA)                         | 2.00        | 1.871       | J              | ng/L |   | 94   | 50 - 155    |
| Perfluorododecanoic acid (PFDoA)                         | 2.00        | 1.914       | J              | ng/L |   | 96   | 60 - 141    |
| Perfluorotridecanoic acid (PFTrDA)                       | 2.00        | 1.912       | J              | ng/L |   | 96   | 52 - 140    |
| Perfluorotetradecanoic acid (PFTeDA)                     | 2.00        | 2.468       |                | ng/L |   | 123  | 52 - 156    |
| Perfluorobutanesulfonic acid (PFBS)                      | 1.77        | 1.837       | J              | ng/L |   | 104  | 63 - 145    |
| Perfluoropentanesulfonic acid (PFPeS)                    | 1.88        | 2.062       |                | ng/L |   | 110  | 58 - 144    |
| Perfluorohexanesulfonic acid (PFHxS)                     | 1.82        | 2.090       |                | ng/L |   | 115  | 44 - 158    |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 1.90        | 1.940       | J              | ng/L |   | 102  | 51 - 150    |
| Perfluorooctanesulfonic acid (PFOS)                      | 1.86        | 1.874       | J              | ng/L |   | 101  | 43 - 162    |
| Perfluorononanesulfonic acid (PFNS)                      | 1.92        | 1.870       | J              | ng/L |   | 97   | 46 - 151    |
| Perfluorododecanesulfonic acid (PFDoS)                   | 1.94        | 1.564       | J              | ng/L |   | 81   | 30 - 138    |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 7.47        | 7.596       | J              | ng/L |   | 102  | 52 - 158    |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 7.58        | 7.867       | J              | ng/L |   | 104  | 48 - 158    |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 7.66        | 8.544       |                | ng/L |   | 111  | 46 - 165    |
| Perfluorooctanesulfonamide (PFOSA)                       | 2.00        | 2.346       |                | ng/L |   | 117  | 47 - 163    |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 2.00        | 2.425       |                | ng/L |   | 121  | 54 - 155    |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 2.00        | 2.106       |                | ng/L |   | 105  | 49 - 156    |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 2.00        | 2.047       |                | ng/L |   | 102  | 32 - 160    |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 2.00        | 2.093       |                | ng/L |   | 105  | 51 - 154    |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 20.0        | 21.64       |                | ng/L |   | 108  | 56 - 151    |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 20.0        | 19.28       | J              | ng/L |   | 96   | 60 - 147    |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 8.00        | 8.241       |                | ng/L |   | 103  | 58 - 154    |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)              | 7.54        | 8.827       |                | ng/L |   | 117  | 61 - 148    |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 4.00        | 4.244       |                | ng/L |   | 106  | 49 - 154    |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)               | 4.00        | 4.446       |                | ng/L |   | 111  | 47 - 160    |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 7.46        | 7.366       | J              | ng/L |   | 99   | 44 - 167    |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 7.54        | 7.458       | J              | ng/L |   | 99   | 36 - 158    |
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)       | 3.56        | 3.842       | J              | ng/L |   | 108  | 56 - 144    |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-627485/2-A

Matrix: Water

Analysis Batch: 627555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                    | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------------------------------------|-------------|-------------|----------------|------|---|------|-------------|
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 10.0        | 9.412       | J              | ng/L |   | 94   | 32 - 161    |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 50.0        | 41.83       | J              | ng/L |   | 84   | 39 - 156    |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 50.0        | 47.94       | J              | ng/L |   | 96   | 36 - 149    |
| Perfluorodecanesulfonic acid (PFDS)        | 1.93        | 1.962       | J              | ng/L |   | 102  | 50 - 144    |
| Perfluoro-3-methoxypropanoic acid (PFMPA)  | 4.00        | 3.969       | J              | ng/L |   | 99   | 48 - 150    |

| Isotope Dilution | LLCS %Recovery | LLCS Qualifier | Limits   |
|------------------|----------------|----------------|----------|
| 13C4 PFBA        | 91.4           |                | 10 - 130 |
| 13C5 PFPeA       | 81.5           |                | 40 - 150 |
| 13C5 PFHxA       | 77.5           |                | 40 - 150 |
| 13C4 PFHpA       | 81.6           |                | 40 - 150 |
| 13C8 PFOA        | 86.5           |                | 30 - 140 |
| 13C9 PFNA        | 97.1           |                | 30 - 140 |
| 13C6 PFDA        | 110            |                | 20 - 140 |
| 13C7 PFUnA       | 100            |                | 20 - 140 |
| 13C2 PFTeDA      | 73.2           |                | 10 - 130 |
| 13C3 PFBS        | 103            |                | 25 - 150 |
| 13C3 PFHxS       | 96.8           |                | 25 - 150 |
| 13C8 PFOS        | 104            |                | 20 - 140 |
| 13C8 FOSA        | 103            |                | 10 - 130 |
| d3-NMeFOSAA      | 108            |                | 10 - 200 |
| d5-NEtFOSAA      | 115            |                | 10 - 200 |
| M2-4:2 FTS       | 142            |                | 25 - 200 |
| M2-6:2 FTS       | 138            |                | 25 - 200 |
| M2-8:2 FTS       | 124            |                | 25 - 200 |
| 13C3 HFPO-DA     | 77.2           |                | 25 - 160 |
| d7-N-MeFOSE-M    | 100            |                | 10 - 150 |
| d9-N-EtFOSE-M    | 95.8           |                | 10 - 150 |
| d5-NEtPFOSA      | 73.2           |                | 10 - 130 |
| d3-NMePFOSA      | 75.3           |                | 10 - 130 |
| 13C2-PFDoDA      | 92.4           |                | 10 - 150 |

Lab Sample ID: 460-311364-2 DU

Matrix: Water

Analysis Batch: 627555

Client Sample ID: RXMW-5\_P

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                         | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Perfluorobutanoic acid (PFBA)   | 2.66          | J                | 3.141     | J            | ng/L |   | 16  | 30        |
| Perfluoropentanoic acid (PFPeA) | 1.65          | J                | 1.735     | J            | ng/L |   | 5   | 30        |
| Perfluorohexanoic acid (PFHxA)  | 2.43          |                  | 2.220     |              | ng/L |   | 9   | 30        |
| Perfluoroheptanoic acid (PFHpA) | 1.93          |                  | 1.645     | J            | ng/L |   | 16  | 30        |
| Perfluorooctanoic acid (PFOA)   | 27.9          |                  | 23.34     |              | ng/L |   | 18  | 30        |
| Perfluorononanoic acid (PFNA)   | 2.33          |                  | 2.301     |              | ng/L |   | 1   | 30        |
| Perfluorodecanoic acid (PFDA)   | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30        |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 460-311364-2 DU

Matrix: Water

Analysis Batch: 627555

Client Sample ID: RXMW-5\_P

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                                  | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|----------------------------------------------------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Perfluoroundecanoic acid (PFUnA)                         | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorododecanoic acid (PFDoA)                         | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorotridecanoic acid (PFTrDA)                       | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorotetradecanoic acid (PFTeDA)                     | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorobutanesulfonic acid (PFBS)                      | 3.56          |                  | 3.095     |              | ng/L |   | 14  | 30    |
| Perfluoropentanesulfonic acid (PFPeS)                    | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorohexanesulfonic acid (PFHxS)                     | 3.09          |                  | 3.005     |              | ng/L |   | 3   | 30    |
| Perfluoroheptanesulfonic acid (PFHpS)                    | 2.33          |                  | 2.518     |              | ng/L |   | 8   | 30    |
| Perfluorooctanesulfonic acid (PFOS)                      | 32.9          |                  | 33.55     |              | ng/L |   | 2   | 30    |
| Perfluorononanesulfonic acid (PFNS)                      | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluorododecanesulfonic acid (PFDoS)                   | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)      | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)      | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)      | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| Perfluorooctanesulfonamide (PFOSA)                       | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| N-methylperfluorooctane sulfonamide (NMeFOSA)            | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| N-ethylperfluorooctane sulfonamide (NEtFOSA)             | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)     | 15.6          | U                | 17.1      | U            | ng/L |   | NC  | 30    |
| N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)      | 15.6          | U                | 17.1      | U            | ng/L |   | NC  | 30    |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| 4,8-Dioxo-3H-perfluorononanoic acid (ADONA)              | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| Perfluoro-4-methoxybutanoic acid (PFMBA)                 | 3.12          | U                | 3.43      | U            | ng/L |   | NC  | 30    |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)               | 3.12          | U                | 3.43      | U            | ng/L |   | NC  | 30    |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | 6.24          | U                | 6.85      | U            | ng/L |   | NC  | 30    |
| Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)       | 3.12          | U                | 3.43      | U            | ng/L |   | NC  | 30    |

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# QC Sample Results

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 460-311364-2 DU

Matrix: Water

Analysis Batch: 627555

Client Sample ID: RXMW-5\_P

Prep Type: Total/NA

Prep Batch: 627485

| Analyte                                    | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|--------------------------------------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 7.80          | U                | 8.57      | U            | ng/L |   | NC  | 30    |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 39.0          | U                | 42.8      | U            | ng/L |   | NC  | 30    |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 39.0          | U                | 42.8      | U            | ng/L |   | NC  | 30    |
| Perfluorodecanesulfonic acid (PFDS)        | 1.56          | U                | 1.71      | U            | ng/L |   | NC  | 30    |
| Perfluoro-3-methoxypropanoic acid (PFMPA)  | 3.12          | U                | 3.43      | U            | ng/L |   | NC  | 30    |

| Isotope Dilution | %Recovery | DU Qualifier | Limits   |
|------------------|-----------|--------------|----------|
| 13C4 PFBA        | 104       |              | 10 - 130 |
| 13C5 PFPeA       | 105       |              | 35 - 150 |
| 13C5 PFHxA       | 86.5      |              | 55 - 150 |
| 13C4 PFHpA       | 104       |              | 55 - 150 |
| 13C8 PFOA        | 91.7      |              | 60 - 140 |
| 13C9 PFNA        | 120       |              | 55 - 140 |
| 13C6 PFDA        | 116       |              | 50 - 140 |
| 13C7 PFUnA       | 108       |              | 30 - 140 |
| 13C2 PFTeDA      | 80.4      |              | 10 - 130 |
| 13C3 PFBS        | 136       |              | 55 - 150 |
| 13C3 PFHxS       | 118       |              | 55 - 150 |
| 13C8 PFOS        | 120       |              | 45 - 140 |
| 13C8 FOSA        | 111       |              | 30 - 130 |
| d3-NMeFOSAA      | 108       |              | 45 - 200 |
| d5-NEtFOSAA      | 114       |              | 10 - 200 |
| M2-4:2 FTS       | 155       |              | 60 - 200 |
| M2-6:2 FTS       | 151       |              | 60 - 200 |
| M2-8:2 FTS       | 150       |              | 50 - 200 |
| 13C3 HFPO-DA     | 87.3      |              | 25 - 160 |
| d7-N-MeFOSE-M    | 107       |              | 10 - 150 |
| d9-N-EtFOSE-M    | 88.8      |              | 10 - 150 |
| d5-NEtPFOSA      | 75.6      |              | 10 - 130 |
| d3-NMePFOSA      | 79.8      |              | 15 - 130 |
| 13C2-PFDoDA      | 107       |              | 10 - 150 |

## QC Association Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

### LCMS

#### Prep Batch: 627485

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 460-311364-1        | RXMW-1_P           | Total/NA  | Water  | 1633   |            |
| 460-311364-2        | RXMW-5_P           | Total/NA  | Water  | 1633   |            |
| 460-311364-3        | FB_09132024_P      | Total/NA  | Water  | 1633   |            |
| MB 240-627485/1-A   | Method Blank       | Total/NA  | Water  | 1633   |            |
| LCS 240-627485/3-A  | Lab Control Sample | Total/NA  | Water  | 1633   |            |
| LLCS 240-627485/2-A | Lab Control Sample | Total/NA  | Water  | 1633   |            |
| 460-311364-2 DU     | RXMW-5_P           | Total/NA  | Water  | 1633   |            |

#### Analysis Batch: 627555

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 460-311364-1        | RXMW-1_P           | Total/NA  | Water  | 1633   | 627485     |
| 460-311364-2        | RXMW-5_P           | Total/NA  | Water  | 1633   | 627485     |
| 460-311364-3        | FB_09132024_P      | Total/NA  | Water  | 1633   | 627485     |
| MB 240-627485/1-A   | Method Blank       | Total/NA  | Water  | 1633   | 627485     |
| LCS 240-627485/3-A  | Lab Control Sample | Total/NA  | Water  | 1633   | 627485     |
| LLCS 240-627485/2-A | Lab Control Sample | Total/NA  | Water  | 1633   | 627485     |
| 460-311364-2 DU     | RXMW-5_P           | Total/NA  | Water  | 1633   | 627485     |

Lab Chronicle

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

Client Sample ID: RXMW-1\_P  
Date Collected: 09/13/24 12:05  
Date Received: 09/14/24 19:15

Lab Sample ID: 460-311364-1  
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Prep       | 1633         |     |                 | 627485       | CLB     | EET CLE | 09/18/24 10:06       |
| Total/NA  | Analysis   | 1633         |     | 1               | 627555       | RMN     | EET CLE | 09/19/24 00:33       |

Client Sample ID: RXMW-5\_P  
Date Collected: 09/13/24 13:30  
Date Received: 09/14/24 19:15

Lab Sample ID: 460-311364-2  
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Prep       | 1633         |     |                 | 627485       | CLB     | EET CLE | 09/18/24 10:06       |
| Total/NA  | Analysis   | 1633         |     | 1               | 627555       | RMN     | EET CLE | 09/19/24 00:47       |

Client Sample ID: FB\_09132024\_P  
Date Collected: 09/13/24 12:20  
Date Received: 09/14/24 19:15

Lab Sample ID: 460-311364-3  
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------|
| Total/NA  | Prep       | 1633         |     |                 | 627485       | CLB     | EET CLE | 09/18/24 10:06       |
| Total/NA  | Analysis   | 1633         |     | 1               | 627555       | RMN     | EET CLE | 09/19/24 01:00       |

Laboratory References:

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

## Accreditation/Certification Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

### 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                  | 02-28-25        |
| Georgia           | State               | 4062                  | 02-27-25        |
| Illinois          | NELAP               | 200004                | 08-31-25        |
| Iowa              | State               | 421                   | 06-01-25        |
| Kentucky (UST)    | State               | 112225                | 02-27-25        |
| Kentucky (WW)     | State               | KY98016               | 12-30-24        |
| Minnesota         | NELAP               | 039-999-348           | 12-31-24        |
| New Jersey        | NELAP               | OH001                 | 07-03-25        |
| New York          | NELAP               | 10975                 | 04-02-25        |
| Ohio VAP          | State               | ORELAP 4062           | 02-27-25        |
| Oregon            | NELAP               | 4062                  | 02-27-25        |
| Pennsylvania      | NELAP               | 68-00340              | 08-31-25        |
| Texas             | NELAP               | T104704517-22-19      | 08-31-25        |
| USDA              | US Federal Programs | P330-18-00281         | 01-05-27        |
| Virginia          | NELAP               | 460175                | 09-14-24 *      |
| West Virginia DEP | State               | 210                   | 12-31-24        |

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

Eurofins Edison

# Method Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

| Method | Method Description                              | Protocol | Laboratory |
|--------|-------------------------------------------------|----------|------------|
| 1633   | Per- and Polyfluoroalkyl Substances by LC/MS/MS | EPA      | EET CLE    |
| 1633   | Solid-Phase Extraction (SPE)                    | EPA      | EET CLE    |

**Protocol References:**

EPA = US Environmental Protection Agency

**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  |
| 6  |
| 7  |
| 8  |
| 9  |
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| 12 |
| 13 |
| 14 |
| 15 |

# Sample Summary

Client: Roux Environmental Eng & Geology DPC  
Project/Site: 2828 W 28th Street

Job ID: 460-311364-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 460-311364-1  | RXMW-1_P         | Water  | 09/13/24 12:05 | 09/14/24 19:15 |
| 460-311364-2  | RXMW-5_P         | Water  | 09/13/24 13:30 | 09/14/24 19:15 |
| 460-311364-3  | FB_09132024_P    | Water  | 09/13/24 12:20 | 09/14/24 19:15 |

- 1
- 2
- 3
- 4
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- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

[illegible]

**Job Number:**

### Number of Coolers:

MR Gun #

## Cooler Temperatures

| RAW        |        | CORRECTED |        |
|------------|--------|-----------|--------|
|            |        |           |        |
| Cooler #1: | 7.1 °C | 7.1 °C    | 7.1 °C |
| Cooler #2: | 1.2 °C | 1.2 °C    | 1.2 °C |
| Cooler #3: |        |           |        |
| Cooler #4: |        |           |        |
| Cooler #5: |        |           |        |
| Cooler #6: |        |           |        |
| Cooler #7: |        |           |        |
| Cooler #8: |        |           |        |
| Cooler #9: |        |           |        |

[illegible]

**If pH adjustments are required record the information below:**

**Sample No(s). adjusted:**

Preservative Name/Conc.:

Lot # of Preservative(s):

i). \_\_\_\_\_  
Expiration Date: \_\_\_\_\_

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Initials:**

Date:

9-13-214

## Chain of Custody Record

[illegible]

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------|
| Eurofins - Cleveland Sample Receipt Form/Narrative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  | Login # : _____                              |
| Barberton Facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                              |
| Client <u>Eurofins</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Site Name _____  | Cooler unpacked by: <u>CM</u>                |
| Cooler Received on <u>9/17/24</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Opened on _____  |                                              |
| FedEx: 1 <sup>st</sup> Grd <u>Exp</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UPS FAS Waypoint | Client Drop Off Eurofins Courier Other _____ |
| Receipt After-hours Drop-off Date/Time _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  | Storage Location _____                       |
| Eurofins Cooler # <u>6</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Foam Box         | Client Cooler Box Other _____                |
| Packing material used: <u>Bubble Wrap</u> Foam Plastic Bag None Other _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                              |
| COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water None _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                                              |
| 1 Cooler temperature upon receipt <input checked="" type="checkbox"/> See Multiple Cooler Form                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                                              |
| IR GUN # <u>22</u> (CF <u>-01</u> °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  |                                              |
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>2</u><br>- Were the seals on the outside of the cooler(s) signed & dated? <u>Yes</u> No NA<br>- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <u>Yes</u> <u>No</u><br>- Were tamper/custody seals intact and uncompromised? <u>Yes</u> No NA<br>3 Shippers' packing slip attached to the cooler(s)? <u>Yes</u> No<br>4 Did custody papers accompany the sample(s)? <u>Yes</u> No<br>5 Were the custody papers relinquished & signed in the appropriate place? <u>Yes</u> No<br>6 Was/were the person(s) who collected the samples clearly identified on the COC? <u>Yes</u> No<br>7 Did all bottles arrive in good condition (Unbroken)? <u>Yes</u> No<br>8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? <u>Yes</u> No<br>9 For each sample, does the COC specify preservatives <u>(N)</u> , # of containers <u>(N)</u> , and sample type of grab/comp <u>(N)</u> ? <u>Yes</u> No<br>10 Were correct bottle(s) used for the test(s) indicated? <u>Yes</u> No<br>11 Sufficient quantity received to perform indicated analyses? <u>Yes</u> No<br>12. Are these work share samples and all listed on the COC? <u>Yes</u> No<br>If yes, Questions 13-17 have been checked at the originating laboratory<br>13 Were all preserved sample(s) at the correct pH upon receipt? <u>Yes</u> No NA pH Strp Lot# HC442471<br>14 Were VOAs on the COC? <u>Yes</u> No<br>15 Were air bubbles > 6 mm in any VOA vials? <u>Yes</u> No NA<br>16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____<br>17 Was a LL Hg or Me Hg trip blank present? <u>Yes</u> No |                  |                                              |
| Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____<br>Concerning _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                                              |
| 18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES <input type="checkbox"/> additional next page                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  | Samples processed by: _____                  |
| 19. SAMPLE CONDITION<br>Sample(s) _____ were received after the recommended holding time had expired.<br>Sample(s) _____ were received in a broken container<br>Sample(s) _____ were received with bubble > 6 mm in diameter (Notify PM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                                              |
| 20. SAMPLE PRESERVATION<br>Sample(s) _____ were further preserved in the laboratory<br>Time preserved _____ Preservative(s) added/Lot number(s): _____<br>VOA Sample Preservation - Date/Time VOAs Frozen _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                                              |

**Login #:** \_\_\_\_\_

[illegible]

Part # 159469-434 MTW EXP 04/25

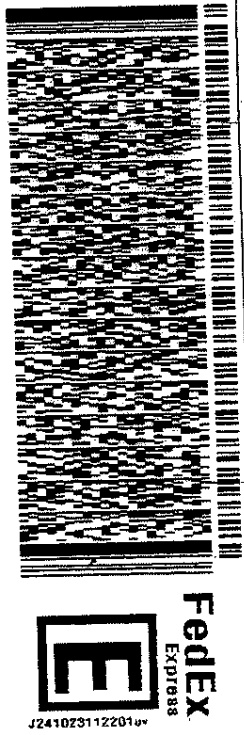
ORIGIN ID:LDJA (732) 549-3900  
DIRA NHER  
EUROFINS EDISON  
777 NEW DURHAM ROAD  
EDISON, NJ 08817  
UNITED STATES US

SHIP DATE 18SEP24  
ACTWGT 48.50 LB  
CWD 0619092/CWF E3808

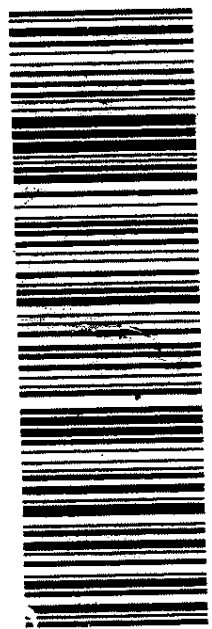
BILL SENDER

TO SHIPPING/RECEIVING  
EUROFINS ENVIRONMENT TESTING NORTH  
180 S. VAN BUREN AVENUE

BARBERTON OH 44203  
(330) 497-9896 REF: 8460 - 186198  
PO: 178



2 of 2  
MPS# 6553 1012 9622  
0263  
Mstr# 6553 1012 9611  
0201  
TUE - 17 SEP 10:30A  
PRIORITY OVERNIGHT  
NX CAKA  
44203  
OH-US CLE



## Chain of Custody Record

[illegible]

Eurofins Cleveland Sample Receipt Form/Narrative  
Barberton Facility

Login # \_\_\_\_\_

Client Buohns

Site Name \_\_\_\_\_

Cooler unpacked by: CMCooler Received on 9/17/24Opened on 9/17/24FedEx: 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 # 2

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 FormIR GUN # 22

(CF -01 °C)

Observed Cooler Temp. \_\_\_\_\_ °C

Corrected Cooler Temp \_\_\_\_\_ °C

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

-Were the seals on the outside of the cooler(s) signed &amp; 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 ☐ NA

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

☒ Yes ☐ No ☐ NA

5 Were the custody papers relinquished &amp; 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 ☐ NA9 For each sample, does the COC specify preservatives (YN), # of containers (YN), and sample type of grab/comp (YN)?☒ 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# HC442471

14 Were VOAs on the COC?

☐ Yes ☐ No ☐ NA15 Were air bubbles >6 mm in any VOA vials? ☒ Larger than this.☐ Yes ☐ No ☐ NA

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

☐ Yes ☐ No ☐ NA17 Was a LL Hg or Me Hg trip blank present? ☒ Yes ☐ No

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 &gt;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. \_\_\_\_\_



Part # 159489-434 MTW EXP 04/25

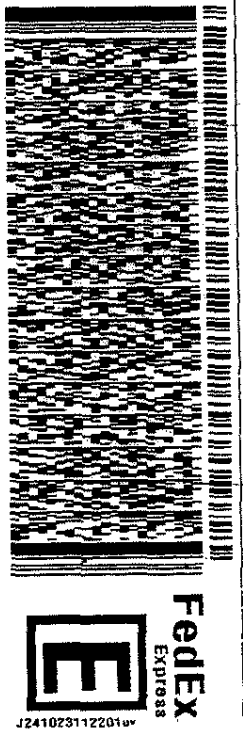
ORIGIN ID: LbJA (732) 549-3900  
DIAA NIMER  
EUROFINS EDISON  
777 NEW DURHAM ROAD  
EDISON, NJ 08817  
UNITED STATES US

SHIP DATE 16SEP24  
ACTWGT 46.50 LB  
CMB 0619092/CAFE3808

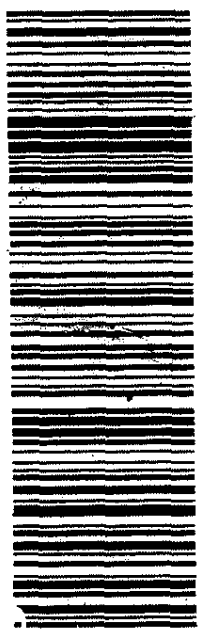
BILL SENDER

TO SHIPPING/RECEIVING  
EUROFINS ENVIRONMENT TESTING NORTH  
180 S. VAN BUREN AVENUE

BARBERTON OH 44203  
(330) 497-9386 REF: 8460-186198  
PO-YES



2 of 2  
MPS# 6553 1012 9622  
Mstr# 0653 1012 9611  
0263 0201  
TUE - 17 SEP 10:30A  
PRIORITY OVERNIGHT  
NX CAKA  
44203  
OH-US CLE



## Login Sample Receipt Checklist

Client: Roux Environmental Eng & Geology DPC

Job Number: 460-311364-1

Login Number: 311364

List Number: 1

Creator: Casallas, Angela C

List Source: Eurofins Edison

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