

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Mike Lankford  
Gadsden Water Works  
515 Albert Rains Blvd  
Gadsden, Alabama 35901

Generated 2/24/2024 12:30:36 PM

**JOB DESCRIPTION**

PFAS

**JOB NUMBER**

810-89763-1

# Case Narrative

Client: Gadsden Water Works  
Project: PFAS

Job ID: 810-89763-1

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**Eurofins Eaton Analytical South Bend**

## Job Narrative 810-89763-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 1/5/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C.

### PFAS

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

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# Client Sample Results

Client: Gadsden Water Works  
Project/Site: PFAS

Job ID: 810-89763-1

**Client Sample ID: Gadsden-RW**

**Lab Sample ID: 810-89763-1**

Date Collected: 01/03/24 19:40

Matrix: Drinking Water

Date Received: 01/05/24 09:00

**Method: EPA 537.1 - Perfluorinated Alkyl Acids (LC/MS)**

| Analyte  | Result           | Qualifier        | RL            | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|--|------------------|------------------|---------------|------|---|-----------------|-----------------|----------------|
| <b>Perfluorooctanesulfonic acid (PFOS)</b>               | <b>0.000020</b>  |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluoroundecanoic acid (PFUnA)                         | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Perfluorohexanoic acid (PFHxA)</b>                    | <b>0.000024</b>  |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluorododecanoic acid (PFDoA)                         | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Perfluorooctanoic acid (PFOA)</b>                     | <b>0.000024</b>  |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluorodecanoic acid (PFDA)                            | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Perfluorohexanesulfonic acid (PFHxS)</b>              | <b>0.0000034</b> |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Perfluorobutanesulfonic acid (PFBS)</b>               | <b>0.000082</b>  |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Perfluoroheptanoic acid (PFHpA)</b>                   | <b>0.0000099</b> |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluorononanoic acid (PFNA)                            | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluorotetradecanoic acid (PFTeDA)                     | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Perfluorotridecanoic acid (PFTrDA)                       | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)              | <0.0000020       |                  | 0.0000020     | mg/L |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| <b>Surrogate</b>   | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| 13C2 PFHxA   | 87               |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| 13C2 PFDA  | 88               |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| 13C3 HFPO-DA   | 86               |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |
| d5-NEtFOSAA  | 91               |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 14:58  | 1              |

**Client Sample ID: Gadsden-FW**

**Lab Sample ID: 810-89763-2**

Date Collected: 01/04/24 11:00

Matrix: Drinking Water

Date Received: 01/05/24 09:00

**Method: EPA 537.1 - Perfluorinated Alkyl Acids (LC/MS)**

| Analyte                                    | Result           | Qualifier | RL        | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--|------------------|-----------|-----------|------|---|----------------|----------------|---------|
| <b>Perfluorooctanesulfonic acid (PFOS)</b> | <b>0.000010</b>  |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluoroundecanoic acid (PFUnA)           | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| <b>Perfluorohexanoic acid (PFHxA)</b>      | <b>0.000022</b>  |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluorododecanoic acid (PFDoA)           | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| <b>Perfluorooctanoic acid (PFOA)</b>       | <b>0.000015</b>  |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluorodecanoic acid (PFDA)              | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)       | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| <b>Perfluorobutanesulfonic acid (PFBS)</b> | <b>0.000065</b>  |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| <b>Perfluoroheptanoic acid (PFHpA)</b>     | <b>0.0000075</b> |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluorononanoic acid (PFNA)              | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |
| Perfluorotetradecanoic acid (PFTeDA)       | <0.0000019       |           | 0.0000019 | mg/L |   | 01/09/24 07:57 | 01/10/24 15:09 | 1       |

Eurofins Eaton Analytical South Bend

# Client Sample Results

Client: Gadsden Water Works  
Project/Site: PFAS

Job ID: 810-89763-1

**Client Sample ID: Gadsden-FW**

**Lab Sample ID: 810-89763-2**

Date Collected: 01/04/24 11:00

Matrix: Drinking Water

Date Received: 01/05/24 09:00

**Method: EPA 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)**

| Analyte  | Result           | Qualifier        | RL            | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|--|------------------|------------------|---------------|------|---|-----------------|-----------------|----------------|
| Perfluorotridecanoic acid (PFTrDA)                       | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)  | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)           | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid       | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid      | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)              | <0.0000019       |                  | 0.0000019     | mg/L |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| <b>Surrogate</b>   | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| 13C2 PFHxA   | 101              |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| 13C2 PFDA  | 101              |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| 13C3 HFPO-DA   | 96               |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |
| d5-NEtFOSAA  | 103              |                  | 70 - 130      |      |   | 01/09/24 07:57  | 01/10/24 15:09  | 1              |



810-89763 Chain of Custody

# Chain of Custody Record

14



Sampler: **MICHAEL BROOKINS**  
 Lab PM: **Nathan Trowbridge**  
 Project: **256) 543-2884**  
 E-Mail: **Nathan.Trowbridge@eurofins.com**  
 PWSID: **81004291**  
 Carrier Tracking No(s): **810-16/10-5449 1**  
 State of Origin: **Page 1 of 1**  
 Job #: **Page 1 of 1**

Company: **Gadsden Water Works**  
 Address: **515 Albert Rains Blvd**  
 City: **Gadsden**  
 State, Zip: **AL, 35901**  
 Phone: **PO #**  
 Compliance Project:  Yes  No  
 Purchase Order not required:  Yes  No  
 IWO #: **81004291**  
 Email: **mankford@gadsdenwater.org**  
 Project Name: **PFA5-533**  
 Project #: **81004291**  
 SSO#

| Due Date Requested:   | Analysis Requested  |
|---|---|
| TAT Requested (days):   | Field Filtered Sample (Yes or No)   |
| Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>537.1_DW_PREC - PFC18  |
| Purchase Order not required: <input type="checkbox"/> Yes <input type="checkbox"/> No | Preservation Codes:<br>A - HCL<br>B - NaOH<br>C - Zn Acetate<br>D - Nitric Acid<br>E - NaHSO4<br>F - MeOH<br>G - Amchlor<br>H - Ascorbic Acid<br>I - Ice<br>J - DI Water<br>K - EDTA<br>L - EDTA<br>M - Hexane<br>N - None<br>O - AsNaO2<br>P - Na2O4S<br>Q - Na2SO3<br>R - Na2S2O3<br>S - H2SO4<br>T - TSP Dodecahydrate<br>U - Acetone<br>V - MCAA<br>W - pH 4.5<br>Y - Trizma<br>Z - other (specify) |

| Sample Identification    | Sample Date       | Sample Time     | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=overst.) | Preservation Code: | Field Filtered Sample (Yes or No) | Total Number of containers | Special Instructions/Note:   |
|--------------------------|-------------------|-----------------|------------------------------|--------------------------------------|--------------------|-----------------------------------|----------------------------|------------------------------|
| <del>GADSDEN - RW</del>  | <del>1/3/24</del> | <del>1940</del> | <del>G</del>                 | <del>drinking Water</del>            | <del>Y</del>       | <del>Y</del>                      | <del>2</del>               | <del>TUR. 11</del>           |
| <del>GADSDEN - FWD</del> | <del>1/4/24</del> | <del>1100</del> | <del>G</del>                 | <del>drinking Water</del>            | <del>Y</del>       | <del>Y</del>                      | <del>1</del>               | <del>Initial Temp: 0.8</del> |
| <del>TRIP BLANK</del>    |                   |                 |                              | <del>drinking Water</del>            |                    |                                   |                            | <del>Final Temp: 0.3</del>   |
|                          |                   |                 |                              | <del>drinking Water</del>            |                    |                                   |                            | <del>Gun # 18</del>          |

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested: I, II, III, IV, Other (specify)

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Empty Kit Relinquished by: \_\_\_\_\_ Date: **1/4/24** Time: **1200** Method of Shipment: \_\_\_\_\_  
 Relinquished by: **M. BROOKINS to Coliar** Date/Time: **1/4/24** Company: **GWWSB** Received by: **KDM** Date/Time: **1-5-24 0900** Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_ Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Custody: Seals Intact  Custody Seal No  Coliar Temperature(s) °C and Other Remarks: **WJF**