

# Pender County

605 E Fremont St  
Burgaw, NC 28425-5115

## Surface Water Treatment Plant

Client Project# Post GAC Exchange  
Samples Received: 5/10/2024

### Analytical Report 0524-778

#### PFAS by Isotope Dilution (non-potable water) PFAS49 List

Report Issue Date: 6/10/2024

I certify that to the best of my knowledge all analytical data presented in this report have been checked for completeness, accuracy, errors and legibility in addition to having been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s). This analytical report was prepared in Portable Document Format (.PDF) and contains 26 pages. This report shall not be reproduced except in full without approval of the laboratory. This will provide assurance that parts of the report are not taken out of context.

Amendment(s):

Signature:



Laura Boivin, QA Associate II



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# Enthalpy Analytical

Job No.: 0524-778-1 PFAS by isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

Sample Name CFE  
 Sampling Site  
 Enthalpy ID 0524-778-003-1A Prep Batch EU17435  
 Matrix aqueous Analyst Jogres  
 Sampling Date 2024-05-10 09:02 Instrument Sauron  
 Received Date 2024-05-10 Sample Vol mL 286.81  
 Prep Date 2024-05-16 13:50 Extract Vol mL 0.4  
 Analysis Date 2024-05-16 22:14 Split Factor N/A  
 Sample Type Sample Method Code EU-047-NPW  
 Bottle ID A

| Compound                          | CAS        | Injection File Name | Sample Concentration ng/L | LOD ng/L      | LOQ ng/L     | Recovery Limits | Recovery | Flags |   |
|-----------------------------------|------------|---------------------|---------------------------|---------------|--------------|-----------------|----------|-------|---|
| Acids                             | PFBA       | 375-22-4            | S160524020                | 4.13          | 0.221        | 0.558           |          |       |   |
|                                   | PFPeA      | 2706-90-3           | S160524020                | 5.95          | 0.160        | 0.558           |          |       |   |
|                                   | PFHxA      | 307-24-4            | S160524020                | 5.80          | 0.187        | 0.558           |          |       |   |
|                                   | PFHpA      | 375-85-9            | S160524020                | 2.34          | 0.195        | 0.558           |          |       |   |
|                                   | PFOA       | 335-67-1            | S160524020                | 5.30          | 0.128        | 0.558           |          |       |   |
|                                   | PFNA       | 375-85-1            | S160524020                | 0.474         | 0.126        | 0.558           |          | J     |   |
|                                   | PFDA       | 335-78-2            | S160524020                | <LOD (0.160)  | 0.160        | 0.558           |          | U     |   |
|                                   | PFUnDA     | 2058-94-8           | S160524020                | <LOD (0.128)  | 0.128        | 0.558           |          | U     |   |
|                                   | PFDoDA     | 307-55-1            | S160524020                | <LOD (0.227)  | 0.227        | 0.558           |          | U     |   |
|                                   | PFTrDA     | 72629-94-8          | S160524020                | <LOD (0.185)  | 0.185        | 0.558           |          | U     |   |
|                                   | PFTeDA     | 378-06-7            | S160524020                | <LOD (0.213)  | 0.213        | 0.558           |          | U     |   |
|                                   | PFHxDA     | 67905-19-5          | S160524020                | <LOD (0.296)  | 0.296        | 0.558           |          | U     |   |
|                                   | Sulfonates | PFBS                | 375-73-5                  | S160524020    | 4.05         | 0.296           | 0.558    |       |   |
|                                   |            | PFPeS               | 2706-91-4                 | S160524020    | 0.714        | 0.115           | 0.526    |       |   |
| PFHxS                             |            | 355-46-4            | S160524020                | 4.76          | 0.431        | 0.511           |          |       |   |
| PFHpS                             |            | 375-92-8            | S160524020                | <LOD (0.270)  | 0.270        | 0.531           |          | U     |   |
| PFOS                              |            | 1763-23-1           | S160524020                | 11.3          | 0.285        | 0.517           |          |       |   |
| PFNS                              |            | 68258-12-1          | S160524020                | <LOD (0.173)  | 0.173        | 0.537           |          | U     |   |
| PFDS                              |            | 335-77-3            | S160524020                | <LOD (0.293)  | 0.293        | 0.537           |          | U     |   |
| 4:2 FTS                           |            | 757124-72-4         | S160524020                | <LOD (0.0723) | 0.0723       | 0.523           |          | U     |   |
| 6:2 FTS                           |            | 27619-97-2          | S160524020                | <LOD (0.263)  | 0.263        | 0.531           |          | U     |   |
| 8:2 FTS                           |            | 39108-34-4          | S160524020                | <LOD (0.125)  | 0.125        | 0.534           |          | U     |   |
| 10:2 FTS                          |            | 120226-80-0         | S160524020                | <LOD (0.427)  | 0.427        | 0.559           |          | U     |   |
| Sulfonamides                      |            | FBSA                | 30334-69-1                | S160524020    | 0.760        | 0.265           | 0.558    |       |   |
|                                   |            | N-EIFOSA            | 4151-50-2                 | S160524020    | <LOD (0.345) | 0.345           | 0.558    |       | U |
|                                   |            | N-EIFOSAA           | 2891-50-6                 | S160524020    | <LOD (0.227) | 0.227           | 0.558    |       | U |
|                                   | N-EIFOSE   | 1691-99-2           | S160524020                | <LOD (0.854)  | 0.854        | 2.51            |          | U     |   |
|                                   | N-MeFOSA   | 31506-32-8          | S160524020                | <LOD (0.230)  | 0.230        | 0.558           |          | U     |   |
|                                   | N-MeFOSAA  | 2355-31-9           | S160524020                | <LOD (0.157)  | 0.157        | 0.558           |          | U     |   |
|                                   | N-MeFOSE   | 24448-09-7          | S160524020                | <LOD (0.530)  | 0.530        | 2.51            |          | U     |   |
|                                   | PFOSA      | 754-91-6            | S160524020                | 0.307         | 0.0783       | 0.558           |          | J     |   |
| PFECAAs                           | ADONA      | 919005-14-4         | S160524020                | <LOD (0.151)  | 0.151        | 0.526           |          | U     |   |
|                                   | HFPO-DA    | 13252-13-6          | S160524020                | 5.23          | 0.0691       | 0.558           |          |       |   |
|                                   | NFDHA      | 151772-59-6         | S160524020                | <LOD (0.117)  | 0.117        | 0.558           |          | U     |   |
|                                   | PEPA       | 287239-61-2         | S160524020                | 2.61          | 0.105        | 0.558           |          |       |   |
|                                   | PFECA-G    | 801212-59-9         | S160524020                | <LOD (0.0744) | 0.0744       | 0.558           |          | U     |   |
|                                   | PFMOAA     | 674-13-5            | S160524020                | 25.6          | 0.282        | 0.558           |          |       |   |
|                                   | PFMOBA     | 863090-89-5         | S160524020                | <LOD (0.936)  | 0.936        | 1.26            |          | U     |   |
|                                   | PFMOPrA    | 377-73-1            | S160524020                | <LOD (0.199)  | 0.199        | 0.558           |          | U     |   |
|                                   | PFO2HxA    | 39492-86-1          | S160524020                | 4.46          | 0.180        | 0.558           |          |       |   |
|                                   | PFO3OA     | 39492-89-2          | S160524020                | <LOD (0.256)  | 0.256        | 0.558           |          | U     |   |
|                                   | PFO4DA     | 39492-80-5          | S160524020                | <LOD (0.441)  | 0.441        | 2.79            |          | U     |   |
|                                   | PFO5DA     | 39492-01-6          | S160524020                | <LOD (0.446)  | 0.446        | 2.79            |          | U     |   |
|                                   | PMPA       | 13140-29-9          | S160524020                | 9.66          | 0.131        | 0.558           |          |       |   |
|                                   | PFESAs     | 11Cl-PF3OUdS        | 763051-92-9               | S160524020    | <LOD (0.263) | 0.263           | 0.526    |       | U |
| 9Cl-PF3ONS                        |            | 756428-58-1         | S160524020                | <LOD (0.357)  | 0.357        | 0.520           |          | U     |   |
| Nanon Byproduct 1 (PS Acid)       |            | 29311-67-9          | S160524020                | <LOD (0.298)  | 0.298        | 0.558           |          | U     |   |
| Nanon Byproduct 2 (HydroPF8 Acid) |            | 749838-20-2         | S160524020                | <LOD (0.462)  | 0.462        | 0.558           |          | U     |   |
| ES                                | PFEESA     | 113507-82-7         | S160524020                | <LOD (0.168)  | 0.168        | 0.558           |          | U     |   |
|                                   | MPFBA      | S160524020          |                           |               |              | 20-150%         | 67.7%    |       |   |
|                                   | M5PFPeA    | S160524020          |                           |               |              | 20-150%         | 97.4%    |       |   |
|                                   | M3PFBS     | S160524020          |                           |               |              | 20-150%         | 228.5%   | Q     |   |
|                                   | M2-4:2 FTS | S160524020          |                           |               |              | 20-150%         | 58.6%    |       |   |
|                                   | M5PFHxA    | S160524020          |                           |               |              | 20-150%         | 90.2%    |       |   |
|                                   | M3HFPO-DA  | S160524020          |                           |               |              | 20-150%         | 90.6%    |       |   |
|                                   | M4PFHpA    | S160524020          |                           |               |              | 20-150%         | 82.6%    |       |   |
|                                   | M3PFHxS    | S160524020          |                           |               |              | 20-150%         | 81.6%    |       |   |
|                                   | M2-8:2 FTS | S160524020          |                           |               |              | 20-150%         | 87.4%    |       |   |
|                                   | M8PFOA     | S160524020          |                           |               |              | 20-150%         | 82.7%    |       |   |
|                                   | M9PFNA     | S160524020          |                           |               |              | 20-150%         | 77.7%    |       |   |
|                                   | M8PFOS     | S160524020          |                           |               |              | 20-150%         | 77.0%    |       |   |
|                                   | M2-8:2 FTS | S160524020          |                           |               |              | 20-150%         | 63.2%    |       |   |
| M8FOSA-I                          | S160524020 |                     |                           |               | 20-150%      | 80.7%           |          |       |   |

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Job No.: 0524-778-1 PFAS by Isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

Sample Name CFE  
 Sampling Site  
 Enthalpy ID 0524-778-003-1A Prep Batch EU17435  
 Matrix aqueous Analyst jogres  
 Sampling Date 2024-05-10 09:02 Instrument Sauron  
 Received Date 2024-05-10 Sample Vol mL 286.81  
 Prep Date 2024-05-16 13:50 Extract Vol mL 0.4  
 Analysis Date 2024-05-16 22:14 Split Factor N/A  
 Sample Type Sample Method Code EU-047-NPW  
 Bottle ID A

| Compound     | CAS | Injection File Name | Sample Concentration ng/L | LOD ng/L | LOQ ng/L | Recovery Limits | Recovery | Flags |
|--------------|-----|---------------------|---------------------------|----------|----------|-----------------|----------|-------|
| M6PFDA       |     | S160524020          |                           |          |          | 20-150%         | 81.7%    |       |
| d3-N-MeFOSAA |     | S160524020          |                           |          |          | 20-150%         | 50.3%    |       |
| d5-N-EtFOSAA |     | S160524020          |                           |          |          | 20-150%         | 41.5%    |       |
| M7PFUdA      |     | S160524020          |                           |          |          | 20-150%         | 72.0%    |       |
| MPPFdA       |     | S160524020          |                           |          |          | 20-150%         | 78.0%    |       |
| M2PFTeDA     |     | S160524020          |                           |          |          | 20-150%         | 49.0%    |       |
| d3-N-MeFOSA  |     | S160524020          |                           |          |          | 10-200%         | 8.8%     | Q     |
| d5-N-EtFOSA  |     | S160524020          |                           |          |          | 10-200%         | 7.9%     | Q     |
| d7-N-MeFOSE  |     | S160524020          |                           |          |          | 10-200%         | 81.8%    |       |
| d9-N-EtFOSE  |     | S160524020          |                           |          |          | 10-200%         | 52.1%    |       |

# Enthalpy Analytical

Job No.: 0524-778-1 PFAS by Isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

Sample Name Pre CW  
 Sampling Site  
 Enthalpy ID 0524-778-002-1A Prep Batch EU17435  
 Matrix aqueous Analyst jogres  
 Sampling Date 2024-05-10 09:00 Instrument Sauron  
 Received Date 2024-05-10 Sample Vol mL 290.81  
 Prep Date 2024-05-16 13:50 Extract Vol mL 0.4  
 Analysis Date 2024-05-16 21:52 Split Factor N/A  
 Sample Type Sample Method Code EU-047-NPW  
 Bottle ID A

|                                    | Compound    | CAS                          | Injection File Name | Sample Concentration ng/L | LOD ng/L     | LOQ ng/L | Recovery Limits | Recovery | Flags |   |
|------------------------------------|-------------|------------------------------|---------------------|---------------------------|--------------|----------|-----------------|----------|-------|---|
| Acids                              | PFBA        | 375-22-4                     | S160524019          | 2.67                      | 0.218        | 0.550    |                 |          |       |   |
|                                    | PFPeA       | 2706-90-3                    | S160524019          | 2.76                      | 0.157        | 0.550    |                 |          |       |   |
|                                    | PFHxA       | 307-24-4                     | S160524019          | 2.42                      | 0.184        | 0.550    |                 |          |       |   |
|                                    | PFHpA       | 375-85-9                     | S160524019          | 1.01                      | 0.193        | 0.550    |                 |          |       |   |
|                                    | PFOA        | 335-67-1                     | S160524019          | 1.25                      | 0.126        | 0.550    |                 |          |       |   |
|                                    | PFNA        | 375-95-1                     | S160524019          | <LOD (0.124)              | 0.124        | 0.550    |                 |          | U     |   |
|                                    | PFDA        | 335-76-2                     | S160524019          | <LOD (0.157)              | 0.157        | 0.550    |                 |          | U     |   |
|                                    | PFUnDA      | 2058-94-8                    | S160524019          | <LOD (0.124)              | 0.124        | 0.550    |                 |          | U     |   |
|                                    | PFDoDA      | 307-85-1                     | S160524019          | <LOD (0.224)              | 0.224        | 0.550    |                 |          | U     |   |
|                                    | PFTrDA      | 72829-94-8                   | S160524019          | <LOD (0.182)              | 0.182        | 0.550    |                 |          | U     |   |
|                                    | PFTeDA      | 376-06-7                     | S160524019          | <LOD (0.210)              | 0.210        | 0.550    |                 |          | U     |   |
|                                    | PFHxDA      | 67905-19-5                   | S160524019          | <LOD (0.292)              | 0.292        | 0.550    |                 |          | U     |   |
|                                    | Sulfonates  | PFBS                         | 375-73-5            | S160524019                | 2.24         | 0.292    | 0.550           |          |       |   |
|                                    |             | PFPeS                        | 2706-91-4           | S160524019                | 0.259        | 0.113    | 0.518           |          |       | J |
| PFHxS                              |             | 355-46-4                     | S160524019          | 1.47                      | 0.425        | 0.504    |                 |          |       |   |
| PFHpS                              |             | 375-92-8                     | S160524019          | <LOD (0.266)              | 0.266        | 0.524    |                 |          | U     |   |
| PFOS                               |             | 1763-23-1                    | S160524019          | 1.71                      | 0.291        | 0.510    |                 |          |       |   |
| PFNS                               |             | 68259-12-1                   | S160524019          | <LOD (0.171)              | 0.171        | 0.530    |                 |          | U     |   |
| PFDS                               |             | 335-77-3                     | S160524019          | <LOD (0.289)              | 0.289        | 0.530    |                 |          | U     |   |
| 4:2 FTS                            |             | 757124-72-4                  | S160524019          | <LOD (0.0714)             | 0.0714       | 0.515    |                 |          | U     |   |
| 6:2 FTS                            |             | 27619-97-2                   | S160524019          | <LOD (0.280)              | 0.280        | 0.524    |                 |          | U     |   |
| 8:2 FTS                            |             | 39108-34-4                   | S160524019          | <LOD (0.123)              | 0.123        | 0.527    |                 |          | U     |   |
| 10:2 FTS                           | 120226-60-0 | S160524019                   | <LOD (0.421)        | 0.421                     | 0.550        |          |                 | U        |       |   |
| Sulfonamides                       | FBSA        | 30334-69-1                   | S160524019          | <LOD (0.281)              | 0.281        | 0.550    |                 |          | U     |   |
|                                    | N-EIFOSA    | 4151-50-2                    | S160524019          | <LOD (0.340)              | 0.340        | 0.550    |                 |          | U     |   |
|                                    | N-EIFOSAA   | 2991-50-6                    | S160524019          | <LOD (0.224)              | 0.224        | 0.550    |                 |          | U     |   |
|                                    | N-EIFOSE    | 1691-99-2                    | S160524019          | <LOD (0.842)              | 0.842        | 2.48     |                 |          | U     |   |
|                                    | N-MeFOSA    | 31506-32-8                   | S160524019          | <LOD (0.227)              | 0.227        | 0.550    |                 |          | U     |   |
|                                    | N-MeFOSAA   | 2355-31-9                    | S160524019          | <LOD (0.155)              | 0.155        | 0.550    |                 |          | U     |   |
|                                    | N-MeFOSE    | 24448-09-7                   | S160524019          | <LOD (0.523)              | 0.523        | 2.48     |                 |          | U     |   |
|                                    | PFOSA       | 754-91-8                     | S160524019          | 0.302                     | 0.0772       | 0.550    |                 |          | J     |   |
|                                    | ADONA       | 918005-14-4                  | S160524019          | <LOD (0.149)              | 0.149        | 0.521    |                 |          | U     |   |
|                                    | HFPO-DA     | 13252-13-6                   | S160524019          | 2.52                      | 0.0583       | 0.550    |                 |          |       |   |
| PFECAs                             | NFDHA       | 151772-58-6                  | S160524019          | <LOD (0.116)              | 0.116        | 0.550    |                 |          | U     |   |
|                                    | PEPA        | 267239-61-2                  | S160524019          | 0.693                     | 0.103        | 0.550    |                 |          |       |   |
|                                    | PFECA-G     | 801212-59-9                  | S160524019          | <LOD (0.0734)             | 0.0734       | 0.550    |                 |          | U     |   |
|                                    | PFMOAA      | 674-13-5                     | S160524019          | 12.2                      | 0.279        | 0.550    |                 |          |       |   |
|                                    | PFMOBA      | 863090-89-5                  | S160524019          | <LOD (0.923)              | 0.923        | 1.24     |                 |          | U     |   |
|                                    | PFMOPrA     | 377-73-1                     | S160524019          | <LOD (0.196)              | 0.196        | 0.550    |                 |          | U     |   |
|                                    | PFO2HxA     | 39492-88-1                   | S160524019          | 2.43                      | 0.177        | 0.550    |                 |          |       |   |
|                                    | PFO3OA      | 39492-89-2                   | S160524019          | <LOD (0.253)              | 0.253        | 0.550    |                 |          | U     |   |
|                                    | PFO4DA      | 39492-90-5                   | S160524019          | <LOD (0.435)              | 0.435        | 2.75     |                 |          | U     |   |
|                                    | PFO5DA      | 39492-91-8                   | S160524019          | <LOD (0.440)              | 0.440        | 2.75     |                 |          | U     |   |
|                                    | PMPA        | 13140-29-9                   | S160524019          | 5.14                      | 0.130        | 0.550    |                 |          |       |   |
|                                    | PFESAs      | 11Cl-PF3OUdS                 | 763051-92-9         | S160524019                | <LOD (0.260) | 0.260    | 0.518           |          |       | U |
|                                    |             | 9Cl-PF3ONS                   | 756426-58-1         | S160524019                | <LOD (0.352) | 0.352    | 0.513           |          |       | U |
|                                    |             | Nation Byproduct 1 (PS Acid) | 29311-67-9          | S160524019                | <LOD (0.294) | 0.294    | 0.550           |          |       | U |
| Nation Byproduct 2 (Hydro-PS Acid) |             | 749836-20-2                  | S160524019          | <LOD (0.456)              | 0.456        | 0.550    |                 |          | U     |   |
| ES                                 | PFEESA      | 113507-82-7                  | S160524019          | <LOD (0.165)              | 0.165        | 0.550    |                 |          | U     |   |
|                                    | MPFBA       | S160524019                   |                     |                           |              | 20-150%  | 91.2%           |          |       |   |
|                                    | M5PFPeA     | S160524019                   |                     |                           |              | 20-150%  | 98.1%           |          |       |   |
|                                    | M3PFBS      | S160524019                   |                     |                           |              | 20-150%  | 196.8%          | Q        |       |   |
|                                    | M2-4:2 FTS  | S160524019                   |                     |                           |              | 20-150%  | 43.1%           |          |       |   |
|                                    | M5PFHxA     | S160524019                   |                     |                           |              | 20-150%  | 82.9%           |          |       |   |
|                                    | M3HFPO-DA   | S160524019                   |                     |                           |              | 20-150%  | 102.4%          |          |       |   |
|                                    | M4PFHpA     | S160524019                   |                     |                           |              | 20-150%  | 78.2%           |          |       |   |
|                                    | M3PFHxS     | S160524019                   |                     |                           |              | 20-150%  | 77.4%           |          |       |   |
|                                    | M2-8:2 FTS  | S160524019                   |                     |                           |              | 20-150%  | 57.6%           |          |       |   |
|                                    | M8PFOA      | S160524019                   |                     |                           |              | 20-150%  | 79.3%           |          |       |   |
|                                    | M9PFNA      | S160524019                   |                     |                           |              | 20-150%  | 72.6%           |          |       |   |
|                                    | M8PFOS      | S160524019                   |                     |                           |              | 20-150%  | 84.3%           |          |       |   |
|                                    | M2-8:2 FTS  | S160524019                   |                     |                           |              | 20-150%  | 60.5%           |          |       |   |
|                                    | M8FOSA-I    | S160524019                   |                     |                           |              | 20-150%  | 65.1%           |          |       |   |

# Enthalpy Analytical

Job No.: 0524-778-1 PFAS by Isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

|               |                  |                |            |
|---------------|------------------|----------------|------------|
| Sample Name   | Pre CW           |                |            |
| Sampling Site |                  |                |            |
| Enthalpy ID   | 0524-778-002-1A  | Prep Batch     | EU17435    |
| Matrix        | aqueous          | Analyst        | jngres     |
| Sampling Date | 2024-05-10 09:00 | Instrument     | Sauron     |
| Received Date | 2024-05-10       | Sample Vol mL  | 200.61     |
| Prep Date     | 2024-05-16 13:50 | Extract Vol mL | 0.4        |
| Analysis Date | 2024-05-16 21:52 | Split Factor   | N/A        |
| Sample Type   | Sample           | Method Code    | EU-047-NPW |
| Bottle ID     | A                |                |            |

| Compound     | CAS | Injection File Name | Sample Concentration ng/L | LOD ng/L | LOQ ng/L | Recovery Limits | Recovery | Flags |
|--------------|-----|---------------------|---------------------------|----------|----------|-----------------|----------|-------|
| M6PFDA       |     | S160524019          |                           |          |          | 20-150%         | 83.0%    |       |
| d3-N-MeFOSAA |     | S160524019          |                           |          |          | 20-150%         | 48.4%    |       |
| d5-N-EiFOSAA |     | S160524019          |                           |          |          | 20-150%         | 46.5%    |       |
| M7PFUDA      |     | S160524019          |                           |          |          | 20-150%         | 77.3%    |       |
| MPFDA        |     | S160524019          |                           |          |          | 20-150%         | 86.8%    |       |
| M2PFTeDA     |     | S160524019          |                           |          |          | 20-150%         | 62.8%    |       |
| d3-N-MeFOCSA |     | S160524019          |                           |          |          | 10-200%         | 8.4%     | Q     |
| d5-N-EiFOCSA |     | S160524019          |                           |          |          | 10-200%         | 9.6%     | Q     |
| d7-N-MeFOSE  |     | S160524019          |                           |          |          | 10-200%         | 114.7%   |       |
| d8-N-EiFOSE  |     | S160524019          |                           |          |          | 10-200%         | 70.0%    |       |

# Enthalpy Analytical

Job No.: 0524-778-1 PFAS by Isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

|               |                  |                |            |
|---------------|------------------|----------------|------------|
| Sample Name   | Post CW          | Prep Batch     | EU17435    |
| Sampling Site |                  | Analyst        | jogres     |
| Enthalpy ID   | 0524-778-001-1A  | Instrument     | Sauron     |
| Matrix        | aqueous          | Sample Vol mL  | 288.11     |
| Sampling Date | 2024-05-10 08:58 | Extract Vol mL | 0.4        |
| Received Date | 2024-05-10       | Split Factor   | N/A        |
| Prep Date     | 2024-05-16 13:50 | Method Code    | EU-047-NPW |
| Analysis Date | 2024-05-16 21:29 |                |            |
| Sample Type   | Sample           |                |            |
| Bottle ID     | A                |                |            |

| Compound                           | CAS        | Injection File Name | Sample Concentration ng/L | LOD ng/L      | LOQ ng/L     | Recovery Limits | Recovery | Flags |   |
|------------------------------------|------------|---------------------|---------------------------|---------------|--------------|-----------------|----------|-------|---|
| Acids                              | PFBA       | 375-22-4            | S160524018                | 2.91          | 0.220        | 0.553           |          |       |   |
|                                    | PFPeA      | 2706-80-3           | S160524018                | 3.61          | 0.156        | 0.553           |          |       |   |
|                                    | PFHxA      | 307-24-4            | S160524018                | 3.48          | 0.185        | 0.553           |          |       |   |
|                                    | PFFHpA     | 375-85-9            | S160524018                | 1.23          | 0.194        | 0.553           |          |       |   |
|                                    | PFOA       | 335-87-1            | S160524018                | 2.18          | 0.127        | 0.553           |          |       |   |
|                                    | PFNA       | 375-95-1            | S160524018                | <LOD (0.125)  | 0.125        | 0.553           |          | U     |   |
|                                    | PFTA       | 335-76-2            | S160524018                | <LOD (0.158)  | 0.158        | 0.553           |          | U     |   |
|                                    | PFOUnDA    | 2058-94-8           | S160524018                | <LOD (0.125)  | 0.125        | 0.553           |          | U     |   |
|                                    | PFDoDA     | 307-55-1            | S160524018                | <LOD (0.225)  | 0.225        | 0.553           |          | U     |   |
|                                    | PFTyDA     | 72629-94-8          | S160524018                | <LOD (0.183)  | 0.183        | 0.553           |          | U     |   |
|                                    | PFTeDA     | 376-06-7            | S160524018                | <LOD (0.211)  | 0.211        | 0.553           |          | U     |   |
|                                    | PFFhDA     | 87905-19-5          | S160524018                | <LOD (0.294)  | 0.294        | 0.553           |          | U     |   |
|                                    | Sulfonates | PFS                 | 375-73-5                  | S160524018    | 2.41         | 0.294           | 0.553    |       |   |
|                                    |            | PFPeS               | 2706-91-4                 | S160524018    | 0.292        | 0.114           | 0.521    |       | J |
| PFFhS                              |            | 355-46-4            | S160524018                | 1.63          | 0.427        | 0.507           |          |       |   |
| PFFpS                              |            | 375-82-8            | S160524018                | <LOD (0.268)  | 0.268        | 0.527           |          | U     |   |
| PFOS                               |            | 1763-23-1           | S160524018                | 2.37          | 0.282        | 0.513           |          |       |   |
| PFNS                               |            | 68259-12-1          | S160524018                | <LOD (0.172)  | 0.172        | 0.533           |          | U     |   |
| PFDS                               |            | 335-77-3            | S160524018                | <LOD (0.291)  | 0.291        | 0.533           |          | U     |   |
| 4:2 FTS                            |            | 757124-72-4         | S160524018                | <LOD (0.0718) | 0.0718       | 0.518           |          | U     |   |
| 8:2 FTS                            |            | 27619-97-2          | S160524018                | <LOD (0.261)  | 0.261        | 0.527           |          | U     |   |
| 8:2 FTS                            |            | 39108-34-4          | S160524018                | <LOD (0.124)  | 0.124        | 0.530           |          | U     |   |
| 10:2 FTS                           |            | 120226-60-0         | S160524018                | <LOD (0.424)  | 0.424        | 0.553           |          | U     |   |
| Sulfonamides                       |            | FBSA                | 30334-69-1                | S160524018    | <LOD (0.263) | 0.263           | 0.553    |       | U |
|                                    |            | N-EIFOSA            | 4151-50-2                 | S160524018    | <LOD (0.342) | 0.342           | 0.553    |       | U |
|                                    |            | N-EIFOSAA           | 2991-50-6                 | S160524018    | <LOD (0.225) | 0.225           | 0.553    |       | U |
|                                    | N-EIFOSE   | 1691-99-2           | S160524018                | <LOD (0.847)  | 0.847        | 2.49            |          | U     |   |
|                                    | N-MeFOSA   | 31508-32-8          | S160524018                | <LOD (0.228)  | 0.228        | 0.553           |          | U     |   |
|                                    | N-MeFOSAA  | 2355-31-9           | S160524018                | <LOD (0.155)  | 0.155        | 0.553           |          | U     |   |
|                                    | N-MeFOSE   | 24448-09-7          | S160524018                | <LOD (0.526)  | 0.526        | 2.49            |          | U     |   |
|                                    | PFOSA      | 764-91-8            | S160524018                | 0.315         | 0.0777       | 0.553           |          | J     |   |
| PFECAs                             | ADONA      | 918005-14-4         | S160524018                | <LOD (0.150)  | 0.150        | 0.524           |          | U     |   |
|                                    | HFPO-DA    | 13252-13-6          | S160524018                | 2.96          | 0.0588       | 0.553           |          |       |   |
|                                    | NFDHA      | 151772-58-6         | S160524018                | <LOD (0.116)  | 0.116        | 0.553           |          | U     |   |
|                                    | PEPA       | 267239-61-2         | S160524018                | 1.14          | 0.104        | 0.553           |          |       |   |
|                                    | PFECA-G    | 801212-59-9         | S160524018                | <LOD (0.0738) | 0.0738       | 0.553           |          | U     |   |
|                                    | PFMOAA     | 674-13-5            | S160524018                | 12.7          | 0.280        | 0.553           |          |       |   |
|                                    | PFMOBA     | 883090-89-5         | S160524018                | <LOD (0.829)  | 0.929        | 1.25            |          | U     |   |
|                                    | PFMOPrA    | 377-73-1            | S160524018                | <LOD (0.197)  | 0.197        | 0.553           |          | U     |   |
|                                    | PFO2HxA    | 39492-88-1          | S160524018                | 5.47          | 0.178        | 0.553           |          |       |   |
|                                    | PFO3OA     | 39492-89-2          | S160524018                | <LOD (0.254)  | 0.254        | 0.553           |          | U     |   |
|                                    | PFO4DA     | 39492-90-5          | S160524018                | <LOD (0.438)  | 0.438        | 2.77            |          | U     |   |
|                                    | PFOSDA     | 39492-91-6          | S160524018                | <LOD (0.443)  | 0.443        | 2.77            |          | U     |   |
|                                    | PMPA       | 13140-29-9          | S160524018                | 8.46          | 0.130        | 0.553           |          |       |   |
|                                    | PFESAs     | 11Cl-PF3OUdS        | 783051-92-9               | S160524018    | <LOD (0.261) | 0.261           | 0.521    |       | U |
| 9Cl-PF3ONS                         |            | 756428-58-1         | S160524018                | <LOD (0.355)  | 0.355        | 0.516           |          | U     |   |
| Nafion Byproduct 1 (PS Acid)       |            | 28311-67-9          | S160524018                | <LOD (0.296)  | 0.296        | 0.553           |          | U     |   |
| Nafion Byproduct 2 (hydro-PS Acid) |            | 749836-20-2         | S160524018                | <LOD (0.458)  | 0.458        | 0.553           |          | U     |   |
| ES                                 | PFESAs     | 113507-82-7         | S160524018                | <LOD (0.166)  | 0.166        | 0.553           |          | U     |   |
|                                    | MPFBA      | S160524018          |                           |               |              | 20-150%         | 71.3%    |       |   |
|                                    | M5PFPeA    | S160524018          |                           |               |              | 20-150%         | 93.2%    |       |   |
|                                    | M3PFBS     | S160524018          |                           |               |              | 20-150%         | 179.8%   | Q     |   |
|                                    | M2-4:2 FTS | S160524018          |                           |               |              | 20-150%         | 45.0%    |       |   |
|                                    | M5PFHxA    | S160524018          |                           |               |              | 20-150%         | 86.6%    |       |   |
|                                    | M3HFPO-DA  | S160524018          |                           |               |              | 20-150%         | 99.8%    |       |   |
|                                    | M4PFHpA    | S160524018          |                           |               |              | 20-150%         | 85.6%    |       |   |
|                                    | M3PFHxS    | S160524018          |                           |               |              | 20-150%         | 80.1%    |       |   |
|                                    | M2-6:2 FTS | S160524018          |                           |               |              | 20-150%         | 60.2%    |       |   |
|                                    | M8PFOA     | S160524018          |                           |               |              | 20-150%         | 84.8%    |       |   |
|                                    | M9PFNA     | S160524018          |                           |               |              | 20-150%         | 77.5%    |       |   |
|                                    | M8PFOS     | S160524018          |                           |               |              | 20-150%         | 83.0%    |       |   |
|                                    | M2-8:2 FTS | S160524018          |                           |               |              | 20-150%         | 62.1%    |       |   |
| M8FOSA-I                           | S160524018 |                     |                           |               | 20-150%      | 57.4%           |          |       |   |

# Enthalpy Analytical

Job No.: 0524-778-1 PFAS by Isotope Dilution (non-potable water)  
 Pender County Post GAC Exchange Surface Water Treatment Plant

## Details

|               |                  |                |            |
|---------------|------------------|----------------|------------|
| Sample Name   | Post CW          |                |            |
| Sampling Site |                  |                |            |
| Enthalpy ID   | 0524-778-001-1A  | Prep Batch     | EU17435    |
| Matrix        | aqueous          | Analyst        | jegres     |
| Sampling Date | 2024-05-10 08:58 | Instrument     | Saaron     |
| Received Date | 2024-05-10       | Sample Vol mL  | 289.11     |
| Prep Date     | 2024-05-16 13:50 | Extract Vol mL | 0.4        |
| Analysis Date | 2024-05-16 21:29 | Split Factor   | N/A        |
| Sample Type   | Sample           | Method Code    | EU-047-NPW |
| Bottle ID     | A                |                |            |

| Compound     | CAS | Injection File Name | Sample Concentration ng/L | LOD ng/L | LOQ ng/L | Recovery Limits | Recovery | Flags |
|--------------|-----|---------------------|---------------------------|----------|----------|-----------------|----------|-------|
| M8PFDA       |     | S160524018          |                           |          |          | 20-150%         | 83.3%    |       |
| d3-N-MeFOSAA |     | S180524018          |                           |          |          | 20-150%         | 50.0%    |       |
| d5-N-EiFOSAA |     | S160524018          |                           |          |          | 20-150%         | 45.6%    |       |
| M7PFUdA      |     | S160524018          |                           |          |          | 20-150%         | 79.0%    |       |
| MPFDaA       |     | S160524018          |                           |          |          | 20-150%         | 85.2%    |       |
| M2PFTeDA     |     | S160524018          |                           |          |          | 20-150%         | 64.0%    |       |
| d3-N-MeFOSA  |     | S160524018          |                           |          |          | 10-200%         | 1.8%     | Q     |
| d5-N-EiFOSA  |     | S160524018          |                           |          |          | 10-200%         | 3.0%     | Q     |
| d7-N-MeFOSE  |     | S180524018          |                           |          |          | 10-200%         | 91.4%    |       |
| d9-N-EiFOSE  |     | S160524018          |                           |          |          | 10-200%         | 58.5%    |       |