# POTABLE WELL SAMPLING REPORT

Potable Well Sampling for Analysis of Per- and Polyfluorinated Alkyl Substances (PFAS) in the Town of Campbell, La Crosse County, Wisconsin

Wisconsin Department of Natural Resources

*Prepared by:*

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August 2021

**TITLE PAGE**

On behalf of the Wisconsin Department of Natural Resources (DNR), this Potable Well Sampling Report was prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) for potable well sampling for analysis of per- and polyfluorinated alkyl substances (PFAS) in the Town of Campbell, La Crosse County, Wisconsin. This report was developed following general guidance presented in the Wood *Potable Well Sampling for Analysis of Per- and Polyfluorinated Alkyl Substances Sampling and Analysis Plan* (Wood SAP), April 2021, and in accordance with the state of Wisconsin's environmental protection and natural resources requirements as specified in the NR 700 series of the Wisconsin Administrative Code (Wis. Adm. Code).

**Project Name:** Potable Well Sampling for Analysis of Per- and Polyfluorinated Alkyl Substances

**Site Location:** Town of Campbell, La Crosse County, Wisconsin

**Contract Number:** 37000-0000017230

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**APPROVAL SIGNATURES:**

**Wood Environment & Infrastructure Solutions, Inc.**

Date:

8/3/2021

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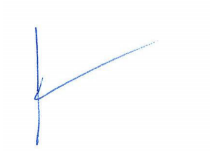

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## ACRONYMS

| | |
|---|---|
| AFFF | Aqueous Film Forming Foam |
| COC | Chain-of-Custody |
| DHS | Department of Health Services |
| DNR | Department of Natural Resources |
| DO | Dissolved Oxygen |
| ES | Enforcement Standard |
| GPS | Global Positioning System |
| HDPE | High-Density Polyethylene |
| LC/MS/MS | Liquid Chromatography with Tandem Mass Spectrometry |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| ng/L | nanograms per liter |
| ORP | Oxidation-Reduction Potential |
| PAL | Preventive Action Limit |
| PFAS | Per- and Polyfluorinated Alkyl Substances |
| PFOA | perfluorooctanoic acid |
| PFOS | perfluorooctane sulfonic acid |
| QA | Quality Assurance |
| QC | Quality Control |
| SAP | Sampling and Analysis Plan |
| UTM | Universal Transverse Mercator |
| WGS | World Geodetic System |
| Wood | Wood Environment & Infrastructure Solutions, Inc. |

# 1.0 INTRODUCTION

Wood Environment & Infrastructure Solutions, Inc. (Wood) has prepared this Potable Well Sampling Report to present sampling method and results for evaluating the presence or absence of per- and polyfluorinated alkyl substances (PFAS) in the Town of Campbell, La Crosse County, Wisconsin. Potable wells located on French Island in the Town of Campbell were sampled for PFAS during the spring of 2021. Figure 1 shows the location of the sampling project, and Figure 2 shows the French Island sampling area.

The scope of work was performed in accordance with the Wood *Potable Well Sampling for Analysis of Per- and Polyfluorinated Alkyl Substances Sampling and Analysis Plan* (Wood SAP), April 2021, and in accordance with the state of Wisconsin's environmental protection and natural resources requirements as specified in the NR 700 series of the Wisconsin Administrative Code (Wis. Adm. Code). The following sections details the sampling methods and results and includes data tables, figures, laboratory analytical reports and data validation summaries.

# 2.0 PROJECT BACKGROUND

PFAS are a class of synthetic organofluorine compounds that possess a chemical structure that gives them unique properties, including thermal stability and the ability to repel both water and oil. These chemical properties make them useful components in a wide variety of consumer and industrial products, including non-stick cookware, food packaging, waterproof clothing, fabric stain protectors, lubricants, paints, and firefighting foams such as aqueous film forming foam (AFFF), and many other industrial applications.

Recent sampling conducted by the city of La Crosse and by residents of the Town of Campbell has identified PFAS contamination in groundwater on French Island (Figure 1). On March 25, 2021, Wisconsin Department of Natural Resources (DNR) issued an interim, area-wide drinking water advisory for residents of French Island due to the unknown extent of groundwater contamination. In order to better understand the extent of PFAS contamination across the community, the DNR conducted sampling at randomly selected private potable wells and select potable wells. The sampling area is shown on Figure 2.

In March 2018, as part of periodic updates to groundwater quality standards under the 'Cycle 10' rulemaking process, the DNR submitted a list of substances to the Wisconsin Department of Health Services (DHS) requesting a review of toxicological data and potential recommendations for new or updated groundwater Enforcement Standard (ES) or preventive action limits (PALs). The Cycle 10 request for DHS included two PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). Based on findings from review of toxicological data for these two PFAS, DHS recommended a groundwater ES of 20 nanograms per liter (ng/L) and a PAL of 2 ng/L for PFOA and PFOS, both individually and combined.

In April 2019, the DNR submitted 34 additional PFAS compounds to DHS for review under the 'Cycle 11' rulemaking process. On November 6, 2020, DHS provided the DNR recommended groundwater standards for 16 additional PFAS compounds. These include Perfluorooctane sulfonamide (FOSA) [DHS recommended standard of 20 ng/L], Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) [300 ng/L], N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) [20 ng/L], Perfluorobutanoic acid (PFBA) [10 µg/L], Perfluorobutanesulfonic acid (PFBS) [450 µg/L], Perfluorododecanoic acid (PFDoA) [500 ng/L], Perfluorohexanoic acid (PFHxA) [150 µg/L], Perfluorotetradecanoic acid (PFTeA) [10 µg/L], Perfluoroundecanoic acid (PFUnA) [3 µg/L], 4,8-

Dioxa-3H-perfluorononanoic acid (DONA) [3 µg/L], Perfluorooctadecanoic acid (PFODA) [400 µg/L], Perfluorohexanesulfonic acid (PFHxS) [40 ng/L], Perfluorononanoic acid (PFNA) [30 ng/L], Perfluorodecanoic acid (PFDA) [300 ng/L], N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) [20 ng/L], N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) [20 ng/L].

Additionally, DHS provided recommendations to DNR for utilizing a hazard index approach to assess the cumulative risk of these PFAS. The hazard index risk assessment approach is used to assess the cumulative risks of compounds with similar health effects that are typically found as mixtures in environmental samples. DHS recommends utilizing bottled water, or another safe alternative drinking water supply, if the hazard index is equal to or greater than one.

Data collected during this project was be compared to DHS recommended standards and hazard index.

## 3.0 SAMPLE PLAN, DESIGN AND RATIONALE

The Study Area for this project was defined by the parcels located on French Island with potable wells located in the Town of Campbell. The project involved sampling at up to 200 randomly selected private properties and offered to 20 public supply well properties within the community. The list of sampled parcels for sampling is provided in Table 1. Figures 3a to 3f presents the locations of the sampled parcels.

### 3.1 PRIVATE PROPERTIES

The sampling plan included sampling private potable wells located within the study area (Figure 2). Parcels were randomly selected for sampling using the process below:

- The parcel data for the 2019 tax year in La Crosse County was downloaded from the State Cartographer's Office and Wisconsin Land Information Program's website. https://www.sco.wisc.edu/parcels/data-county/
- Parcels were filtered to French Island and to include parcels with an improvement value greater than zero.
- Parcels were then grouped into 26 zones with approximately 60 parcels in each zone
- Parcels previously sampled by the city of La Crosse were identified and were not eligible for sampling under this scope of work.
- The target density of each zone was set to approximately 22% (i.e., 13 of 60 parcels to be sampled), which include both new proposed samples to be collect by Wood along with previously sampled properties. The total number of new samples within each zone varied in order to bring the total to an approximate sampling density of 22% for each zone after accounting for previously sampled parcels.
- Parcels were then randomly selected within each zone using a random number generator in ArcGIS 10.5.

Selected well owners within the various zones this area were given the opportunity to have their well sampled by Wood; however, participation in the sampling program was voluntary. If a well owner opted out of sampling or if the property did not have an eligible private well on site, a replacement property was then selected within the zone based on the same randomization process described above.

### 3.2 PUBLIC PROPERTIES

The DNR provided a list of 20 properties with public supply wells to be offered sampling. Well owners were given an opportunity to have their well sampled; however, participation in the sampling program was voluntary. Three of the 20 properties opted out of sampling because they recently had their public supply well sampled by the city of La Crosse.

## 4.0 FIELD INVESTIGATION ACTIVITES

On April 18, 2021 Wood mobilized to the Town of Campbell for three weeks to conduct the field investigation activities. All activities were conducted in accordance with Wood SAP (Wood, April 2021). The field investigation activities consisted of community engagement, sampling the selected potable water supply wells, surveying, sample handling, and quality control efforts as discussed in further detail in the following sections.

### 4.1 COMMUNITY ENGAGEMENT/ACCESS AGREEMENTS

Select well owners located within the study area that were not yet sampled by the city of La Crosse, or by its consultant OS Group, were given an opportunity to have their private potable wells sampled. Wood conducted a door-to-door outreach campaign to selected property owners and distribute information packets. Wood prepared an information packet for well owners to provide additional information about the project and request information about potable wells on their property. The information packets consisted of the following elements:

- Introductory Program Letter – correspondence detailing the project background and instructions for participation,
- Well Survey Questionnaire – a well survey that includes questions regarding water systems, number and location of wells on the property, and the presence of water softeners and/or treatment systems,
- Access Agreement – an access agreement between the property owner and DNR granting the DNR, and its contractors, permission to sample the well or wells on a given property; and,
- Frequently Asked Questions Document – a Frequently Asked Questions Document providing a summary of key questions regarding the sampling project along with answers to allow well owners to make an informed decision regarding opting in or out of the sampling project.

Wood attempted to contact the selected well owners up to three times over a period of 48 hours or more. One attempt was made after 4 pm or on the weekend. If a well owner was available, Wood field staff explained the contents of the information packet and coordinated sampling of their well if they chose to opt-in to the program.

During the door-to-door outreach campaign, a selected private well sample property was re-assigned to a replacement property if any of the following occurred:

- If there was no working drinking water supply well located at the property;
- If the property owner opted-out of the sampling project; or
- If Wood was unable to contact the property owner.

In total, 86 properties were replaced during the door-to-door outreach efforts. Fifty-one of these properties were on city water and were located along Nakomis Avenue, primarily in zones 18 and 26. Eleven properties did not respond to the three outreach attempts. Five properties did not have a potable well on the parcel. Ten properties opted out of sampling. Nine properties either shared a well with a neighboring property that was being sampled or the property was considered not fit to enter.

### 4.2 SAMPLING METHODS

Prior to commencing sampling each day, field personnel held a tailgate safety meeting, reviewed the PFAS protocol checklist to avoid PFAS cross-contamination, and calibrated field equipment per Wood Standard Operating Procedures for PFAS Sampling.

#### 4.2.1 Private or Public Water Supply Sampling

Water supply wells were sampled in accordance with SOP WOOD-04 Private and Public Water Supply Well Sampling (Wood SAP, April 2021). The well samples were collected by filling sample containers directly from sample ports at each identified location. Sample locations were identified following discussions with well owners regarding their individual water system and/or during a site reconnaissance at each property. Wood personnel began by selecting the most appropriate sampling location, ideally from a tap or spigot located at, or near the well head or pump house, and before the water supply is introduced into any storage tanks or treatment units. If the sample had to be collected from a tap or spigot located immediately before a storage tank, spigots downstream of the tank were turned on to prevent any backflow from the tank into the sampling tap or spigot.

Prior to collecting a sample, the sampling port was opened and allowed to flush for at least 15 minutes. The flow rate was measured and recorded to calculate the purge volume. During purging, a minimum of three sets of water quality parameters (pH, specific conductance, temperature, oxidation-reduction potential [ORP], and dissolved oxygen [DO]) was measured. An adequate purge was considered to have been achieved when the pH and specific conductance of the potable water had stabilized, and the turbidity was either stabilized or was below 10 Nephelometric Turbidity Units. Stabilization occurred when, for at least three consecutive measurements, the pH remained constant within 0.1 Standard Unit and the specific conductance varied no more than approximately 10 percent. If after 15 minutes, the water quality parameters had not stabilized in accordance with the identified criteria, the field scientist evaluated the field readings and used professional judgement in determining whether to collect a sample or to continue purging. The decision for sampling was documented on the applicable well sampling form. Field forms are maintained within the Wood project files.

Following purging, the samples were collected directly from the sample port into laboratory-supplied containers.

#### 4.2.2 Surveying

Wood personnel recorded the well locations which were sampled with a handheld global position system (GPS) unit. Well locations were surveyed to a horizontal accuracy of +/- 16 foot using the World Geodetic System (WGS) of 1984, in the Universal Transvers Mercator (UTM) coordinate

system. Surveys were visually checked by Wood personnel against aerial imagery and information provided by the well owner.

### 4.3 SAMPLE HANDLING AND CUSTODY

Samples were collected into appropriate sampling containers that are entirely free of polytetrafluoroethylene (PTFE) or PFAS. Water samples were collected into laboratory provided 250 milliliter (ml) high-density polyethylene (HDPE) bottles. Samples collected for analysis were then placed on ice in shipping containers prior to transport to the laboratory. Samples were kept at a temperature of 4 degrees Celsius from the time of collection until extraction in accordance with laboratory method requirements.

The field sampling personnel and/or the field investigation lead were personally responsible for the care and custody of the samples until they were transferred or properly dispatched to the laboratory.

### 4.4 ANALYTICAL METHODS AND QUALITY CONTROL

Water samples were analyzed for up to 36 PFAS constituents identified in Table 2 by Modified USEPA Test Method 537 using liquid chromatography and tandem mass spectrometry (LC/MS/MS) in accordance with DNR requirements.

For this investigation Wood collected quality assurance/quality control (QA/QC) samples in accordance with the following procedures and in accordance with the requirements of Wis. Adm. Code NR 716.13:

- Duplicate samples (1 duplicate per 10 primary samples).
- Matrix spike/matrix spike duplicate (MS/MSD) samples (1 MS/MSD per 20 primary samples).
- No non-dedicated sampling equipment was used, so no equipment blanks were collected.
- Field blank samples (one field blank sample at each property sampled). The field blanks were submitted to the analytical laboratory but were marked 'HOLD ANALYSIS' on the chain-of-custody (COC). The field blanks were only analyzed at the request of the Wood chemist based on the results of the primary sample analysis.

## 5.0 ANALYTICAL RESULTS AND DATA VALIDATION

Analytical results for the sampling program were provided to the well owners via results notification letters that were submitted within 10-days of receipt of analytical results from the laboratory. The data were also reported to the DNR within one business day. The laboratory analytical results are provided in Appendix A.

The sample analytical results for each well were compared to the applicable regulatory criteria and are listed in Table 3. Data validation summary reports are provided in Appendix B.

Analytical results for samples collected by OS Group are listed in Table 4. Analytical results for samples collected by independent private residents are listed in Table 5. The sample analyte list for the independent private resident samples varied by sample and by analytical lab. Results for samples collected by OS Group and independent private residents were not collected under this

scope of work and data validation for these samples was not performed. Results for the combined datasets are shown on Figures 3a-f.

## 6.0 REFERENCES

Wis. Adm. Code NR 700 – Environmental Protection – Investigation and Remediation of Environmental Contamination, Chapter NR 716 Site Investigations, Register November 2013 No. 695

Wood, April 2021, *Potable Well Sampling for Analysis of Per- and Polyfluorinated Alkyl Substances Sampling and Analysis Plan*.

# TABLES

**Table 1**
**Private Potable Well Sample Locations**
Campbell, Wisconsin

| Well Sampling Tracking ID | Sampling Zone | Site Address | City, State, and Zip of Site Address |
|---|---|---|---|
| 1001 | 1 | 1006 Hanson Road | La Crosse, WI 54603 |
| 1002 | 1 | 1009 Hanson Road | La Crosse, WI 54603 |
| 1003 | 2 | 3107 Edgewater Drive | La Crosse, WI 54603 |
| 1004 | 2 | 3107 Lakeshore Drive | La Crosse, WI 54603 |
| 1005 | 2 | 3115 Lakeshore Drive | La Crosse, WI 54603 |
| 1006 | 2 | 3114 Youngdale Avenue | La Crosse, WI 54603 |
| 1007 | 2 | 731 Lancaster Street | La Crosse, WI 54603 |
| 1008 | 2 | 801 Lancaster Street | La Crosse, WI 54603 |
| 1009 | 2 | 3131 Howry Avenue | La Crosse, WI 54603 |
| 1010 | 3 | 3054 Edgewater Lane | La Crosse, WI 54603 |
| 1011 | 3 | 3050 Edgewater Lane | La Crosse, WI 54603 |
| 1012 | 3 | 3045 Edgewater Lane | La Crosse, WI 54603 |
| 1013 | 3 | 3057 Edgewater Lane | La Crosse, WI 54603 |
| 1014 | 3 | 3041 Lakeshore Drive | La Crosse, WI 54603 |
| 1015 | 3 | 805 Miller Place | La Crosse, WI 54603 |
| 1016 | 3 | 3046 Youngdale Avenue | La Crosse, WI 54603 |
| 1017 | 3 | 810 Lori Place | La Crosse, WI 54603 |
| 1018 | 4 | 2932 Youngdale Avenue | La Crosse, WI 54603 |
| 1019 | 4 | 2928 Pierce Avenue | La Crosse, WI 54603 |
| 1020 | 4 | 2906 Pierce Avenue | La Crosse, WI 54603 |
| 1021 | 4 | 2921 Youngdale Avenue | La Crosse, WI 54603 |
| 1022 | 4 | 2923 Youngdale Avenue | La Crosse, WI 54603 |
| 1023 | 4 | 3018 Youngdale Avenue | La Crosse, WI 54603 |
| 1024 | 4 | 3014 Youngdale Avenue | La Crosse, WI 54603 |
| 1025 | 4 | 3001 Youngdale Avenue | La Crosse, WI 54603 |
| 1026 | 4 | 812 Kelly Place | La Crosse, WI 54603 |
| 1027 | 4 | 3013 Youngdale Avenue | La Crosse, WI 54603 |
| 1028 | 5 | 2922 Bayshore Drive | La Crosse, WI 54603 |
| 1029 | 5 | 2711 Bayshore Drive | La Crosse, WI 54603 |
| 1030 | 5 | 2822 Bayshore Drive | La Crosse, WI 54603 |
| 1031 | 5 | 2812 Bayshore Drive | La Crosse, WI 54603 |
| 1032 | 5 | 2718 Bayshore Drive | La Crosse, WI 54603 |
| 1033 | 5 | 811 Richmond Avenue | La Crosse, WI 54603 |
| 1034 | 5 | 2905 Pierce Avenue | La Crosse, WI 54603 |
| 1035 | 5 | 2729 Bayshore Drive | La Crosse, WI 54603 |
| 1036 | 5 | 3017 Edgewater Lane | La Crosse, WI 54603 |
| 1037 | 5 | 2906 Bayshore Drive | La Crosse, WI 54603 |
| 1038 | 6 | 904 Spillway Drive | La Crosse, WI 54603 |
| 1039 | 6 | 814 Spillway Drive | La Crosse, WI 54603 |
| 1040 | 6 | 822 Richmond Street | La Crosse, WI 54603 |
| 1041 | 6 | 810 Lakeview Drive | La Crosse, WI 54603 |
| 1042 | 6 | 701 Spillway Drive | La Crosse, WI 54603 |
| 1043 | 6 | 901 Spillway Drive | La Crosse, WI 54603 |

**Table 1**
**Private Potable Well Sample Locations**
Campbell, Wisconsin

| Well Sampling Tracking ID | Sampling Zone | Site Address | City, State, and Zip of Site Address |
|---|---|---|---|
| 1044 | 6 | 709 Spillway Drive | La Crosse, WI 54603 |
| 1045 | 7 | 2815 Marion Street | La Crosse, WI 54603 |
| 1046 | 7 | 2810 Lakeshore Dr | La Crosse, WI 54603 |
| 1047 | 7 | 2741 Grand Avenue | La Crosse, WI 54603 |
| 1048 | 7 | 502 Winona Street | La Crosse, WI 54603 |
| 1049 | 7 | 2747 Del Ray Avenue | La Crosse, WI 54603 |
| 1050 | 7 | 2717 Del Ray Avenue | La Crosse, WI 54603 |
| 1051 | 7 | 400 Winona Street | La Crosse, WI 54603 |
| 1052 | 8 | 2624 Lakeshore Drive | La Crosse, WI 54603 |
| 1053 | 8 | 2618 Thomas St | La Crosse, WI 54603 |
| 1054 | 8 | 705 Plainview Road W | La Crosse, WI 54603 |
| 1055 | 8 | 2641 Lakeshore Drive | La Crosse, WI 54603 |
| 1056 | 8 | 2619 Jerald Street | La Crosse, WI 54603 |
| 1057 | 10 | 2612 Hibbard Court | La Crosse, WI 54603 |
| 1058 | 12 | 405 Central Road | La Crosse, WI 54603 |
| 1059 | 12 | 419 Central Road | La Crosse, WI 54603 |
| 1060 | 12 | 441 Central Road | La Crosse, WI 54603 |
| 1061 | 12 | 445 Central Road | La Crosse, WI 54603 |
| 1062 | 12 | 504 Callaway Boulevard | La Crosse, WI 54603 |
| 1063 | 12 | 414 Callaway Boulevard | La Crosse, WI 54603 |
| 1064 | 12 | 411 Central Road | La Crosse, WI 54603 |
| 1065 | 12 | 2513 Western Avenue | La Crosse, WI 54603 |
| 1066 | 12 | 2512 Lakeshore Drive | La Crosse, WI 54603 |
| 1067 | 13 | 222 Olivet Street | La Crosse, WI 54603 |
| 1068 | 13 | 213 Olivet Street | La Crosse, WI 54603 |
| 1069 | 13 | 215 Olivet Street | La Crosse, WI 54603 |
| 1070 | 13 | 316 Olivet Street | La Crosse, WI 54603 |
| 1071 | 13 | 308 Olivet Street | La Crosse, WI 54603 |
| 1072 | 13 | 304 Olivet Street | La Crosse, WI 54603 |
| 1073 | 13 | 407 Olivet Street | La Crosse, WI 54603 |
| 1074 | 13 | 402 Olivet Street | La Crosse, WI 54603 |
| 1075 | 14 | 206 Church Drive | La Crosse, WI 54603 |
| 1076 | 14 | 208 Church Drive | La Crosse, WI 54603 |
| 1077 | 14 | 222 Church Drive | La Crosse, WI 54603 |
| 1078 | 14 | 203 Church Drive | La Crosse, WI 54603 |
| 1079 | 14 | 213 Church Drive | La Crosse, WI 54603 |
| 1080 | 14 | 321 Church Drive | La Crosse, WI 54603 |
| 1081 | 14 | 416 Church Drive | La Crosse, WI 54603 |
| 1082 | 14 | 1926 Sharon Street | La Crosse, WI 54603 |
| 1083 | 14 | 525 Copus Court | La Crosse, WI 54603 |
| 1084 | 16 | 1917 Lombard Court | La Crosse, WI 54603 |
| 1085 | 16 | 1910 Lakeshore Drive | La Crosse, WI 54603 |
| 1086 | 16 | 545 Hinkley Road | La Crosse, WI 54603 |

**Table 1**
**Private Potable Well Sample Locations**
Campbell, Wisconsin

| Well Sampling Tracking ID | Sampling Zone | Site Address | City, State, and Zip of Site Address |
|---|---|---|---|
| 1087 | 16 | 536 Hinkley Road | La Crosse, WI 54603 |
| 1088 | 16 | 424 Hinkley Road | La Crosse, WI 54603 |
| 1089 | 16 | 341 Tellin Court | La Crosse, WI 54603 |
| 1090 | 16 | 239 Tellin Court | La Crosse, WI 54603 |
| 1091 | 16 | 418 Hinkley Road | La Crosse, WI 54603 |
| 1092 | 16 | 340 Tellin Court | La Crosse, WI 54603 |
| 1093 | 16 | 1848 Lakeshore Drive | La Crosse, WI 54603 |
| 1094 | 16 | 1839 Aiken Road | La Crosse, WI 54603 |
| 1095 | 16 | 540 Hinkley Road | La Crosse, WI 54603 |
| 1096 | 17 | 1819 Bainbridge Street | La Crosse, WI 54603 |
| 1097 | 17 | 1815 Bainbridge Street | La Crosse, WI 54603 |
| 1098 | 17 | 1818 Bainbridge Street | La Crosse, WI 54603 |
| 1099 | 17 | 1818 La Fond Avenue | La Crosse, WI 54603 |
| 1100 | 17 | 1824 Caroline Street | La Crosse, WI 54603 |
| 1101 | 17 | 104 Hinkley Road | La Crosse, WI 54603 |
| 1102 | 17 | 216 Hinkley Road | La Crosse, WI 54603 |
| 1103 | 17 | 1831 Bainbridge Street | La Crosse, WI 54603 |
| 1104 | 17 | 122 Hinkley Road | La Crosse, WI 54603 |
| 1105 | 18 | 1707 Nakomis Avenue | La Crosse, WI 54603 |
| 1106 | 18 | 1823 Nakomis Avenue | La Crosse, WI 54603 |
| 1107 | 18 | 1921 Nakomis Avenue | La Crosse, WI 54603 |
| 1108 | 18 | 1905 Nakomis Avenue | La Crosse, WI 54603 |
| 1109 | 18 | 1929 Cherokee Avenue | La Crosse, WI 54603 |
| 1110 | 18 | 1926 Cherokee Avenue | La Crosse, WI 54603 |
| 1111 | 18 | 1925 Nakomis Avenue | La Crosse, WI 54603 |
| 1112 | 18 | 1911 Nakomis Avenue | La Crosse, WI 54603 |
| 1113 | 18 | 1910 Nakomis Avenue | La Crosse, WI 54603 |
| 1114 | 18 | 1922 Cherokee Avenue | La Crosse, WI 54603 |
| 1115 | 19 | 1802 Bainbridge Street | La Crosse, WI 54603 |
| 1116 | 19 | 1747 Bainbridge Street | La Crosse, WI 54603 |
| 1117 | 19 | 1808 Caroline Street | La Crosse, WI 54603 |
| 1118 | 19 | 1809 Caroline Street | La Crosse, WI 54603 |
| 1119 | 19 | 1803 Bainbridge Street | La Crosse, WI 54603 |
| 1120 | 19 | 137 Tellin Court | La Crosse, WI 54603 |
| 1121 | 19 | 1738 Caroline Street | La Crosse, WI 54603 |
| 1122 | 19 | 1742 Caroline Street | La Crosse, WI 54603 |
| 1123 | 19 | 1736 Bainbridge Street | La Crosse, WI 54603 |
| 1124 | 19 | 1734 La Fond Avenue | La Crosse, WI 54603 |
| 1125 | 19 | 1749 La Crescent Street | La Crosse, WI 54603 |
| 1126 | 20 | 1703 Bainbridge Street | La Crosse, WI 54603 |
| 1127 | 20 | 1725 La Fond Avenue | La Crosse, WI 54603 |
| 1128 | 20 | 1727 Caroline Street | La Crosse, WI 54603 |
| 1129 | 20 | 1724 Caroline Street | La Crosse, WI 54603 |

**Table 1**
**Private Potable Well Sample Locations**
Campbell, Wisconsin

| Well Sampling Tracking ID | Sampling Zone | Site Address | City, State, and Zip of Site Address |
|---|---|---|---|
| 1130 | 20 | 1720 Caroline Street | La Crosse, WI 54603 |
| 1131 | 20 | 1716 La Fond Avenue | La Crosse, WI 54603 |
| 1132 | 20 | 1718 Bainbridge Street | La Crosse, WI 54603 |
| 1133 | 20 | 1719 Bainbridge Street | La Crosse, WI 54603 |
| 1134 | 19 | 1731 La Crescent Street | La Crosse, WI 54603 |
| 1135 | 20 | 1723 La Crescent Street | La Crosse, WI 54603 |
| 1136 | 20 | 1728 La Crescent Street | La Crosse, WI 54603 |
| 1137 | 20 | 1711 Caroline Street | La Crosse, WI 54603 |
| 1138 | 21 | 1636 Lakeshore Drive | La Crosse, WI 54603 |
| 1139 | 21 | 1619 La Crescent Street | La Crosse, WI 54603 |
| 1140 | 21 | 1640 Caroline Street | La Crosse, WI 54603 |
| 1141 | 21 | 1621 Caroline Street | La Crosse, WI 54603 |
| 1142 | 21 | 1650 Bainbridge St | La Crosse, WI 54603 |
| 1143 | 21 | 1631 Lakeshore Drive | La Crosse, WI 54603 |
| 1144 | 21 | 1649 Lakeshore Drive | La Crosse, WI 54603 |
| 1145 | 21 | 1630 Bainbridge Street | La Crosse, WI 54603 |
| 1146 | 21 | 1638 Lakeshore Drive | La Crosse, WI 54603 |
| 1147 | 22 | 1605 Bainbridge Street | La Crosse, WI 54603 |
| 1148 | 22 | 1516 Bainbridge Street | La Crosse, WI 54603 |
| 1149 | 22 | 1626 Bainbridge Street | La Crosse, WI 54603 |
| 1150 | 22 | 1606 Lakeshore Drive | La Crosse, WI 54603 |
| 1151 | 22 | 1619 Bainbridge Street | La Crosse, WI 54603 |
| 1152 | 22 | 1615 Bainbridge Street | La Crosse, WI 54603 |
| 1153 | 22 | 1608 Caroline Street | La Crosse, WI 54603 |
| 1154 | 22 | 204 Goddard Street, 1515 Caroline Street, And 202 Goddard Street | La Crosse, WI 54603 |
| 1155 | 22 | 1609 Caroline Street | La Crosse, WI 54603 |
| 1156 | 22 | 1607 Caroline Street | La Crosse, WI 54603 |
| 1157 | 22 | 1522 Caroline Street | La Crosse, WI 54603 |
| 1158 | 22 | 1617 Caroline Street | La Crosse, WI 54603 |
| 1159 | 23 | 1424 Bainbridge Street | La Crosse, WI 54603 |
| 1160 | 23 | 1416 Bainbridge Street | La Crosse, WI 54603 |
| 1161 | 23 | 205 William Street | La Crosse, WI 54603 |
| 1162 | 23 | 1410 Caroline Street | La Crosse, WI 54603 |
| 1163 | 23 | 1412 La Crescent Street | La Crosse, WI 54603 |
| 1164 | 23 | 1402 La Crescent Street | La Crosse, WI 54603 |
| 1165 | 23 | 1413 La Crescent Street | La Crosse, WI 54603 |
| 1166 | 23 | 1432 Caroline Street | La Crosse, WI 54603 |
| 1167 | 23 | 1408 Caroline Street | La Crosse, WI 54603 |
| 1168 | 23 | 1407 Richmond Bay Court | La Crosse, WI 54603 |
| 1169 | 24 | 1212 Bainbridge Street | La Crosse, WI 54603 |
| 1170 | 24 | 1213 La Crescent Place | La Crosse, WI 54603 |
| 1171 | 24 | 1303 La Crescent Street | La Crosse, WI 54603 |

**Table 1**
**Private Potable Well Sample Locations**
Campbell, Wisconsin

| Well Sampling Tracking ID | Sampling Zone | Site Address | City, State, and Zip of Site Address |
|---|---|---|---|
| 1172 | 24 | 126 Washburn Street | La Crosse, WI 54603 |
| 1173 | 24 | 1334 Caroline Street | La Crosse, WI 54603 |
| 1174 | 24 | 1314 Caroline Street | La Crosse, WI 54603 |
| 1175 | 24 | 1305 La Crescent St | La Crosse, WI 54603 |
| 1176 | 24 | 1311 Caroline Street | La Crosse, WI 54603 |
| 1177 | 24 | 125 Sperbeck Street | La Crosse, WI 54603 |
| 1178 | 24 | 1304 La Crescent Street | La Crosse, WI 54603 |
| 1180 | 25 | 110 Sperbeck Street | La Crosse, WI 54603 |
| 1181 | 25 | 124 Sperbeck Street | La Crosse, WI 54603 |
| 1182 | 25 | 121 Walnut Street | La Crosse, WI 54603 |
| 1183 | 25 | 139 Usher Street | La Crosse, WI 54603 |
| 1184 | 25 | 1111 La Crescent Street | La Crosse, WI 54603 |
| 1185 | 25 | 128 Locust Street | La Crosse, WI 54603 |
| 1186 | 25 | 907 La Crescent Street | La Crosse, WI 54603 |
| 1187 | 25 | 148 Schultz Drive | La Crosse, WI 54603 |
| 1188 | 25 | 1007 La Crescent Street | La Crosse, WI 54603 |
| 1189 | 25 | 132 Locust Street | La Crosse, WI 54603 |
| 1190 | 26 | 1508 Nakomis Avenue | La Crosse, WI 54603 |
| 1191 | 26 | 1357 Nakomis Avenue | La Crosse, WI 54603 |
| 1192 | 26 | 1524 Nakomis Avenue | La Crosse, WI 54603 |
| 1193 | 7 | 615 Sanborn Street | La Crosse, WI 54603 |
| 1194 | 26 | 1521 Nakomis Avenue | La Crosse, WI 54603 |
| 1195 | 26 | 1344 Nakomis Avenue | La Crosse, WI 54603 |
| 1196 | 16 | 537 Hinkley Road | La Crosse, WI 54603 |
| 1197 | 3 | 814 Lori Place | La Crosse, WI 54603 |
| 1198 | 20 | 1727 Bainbridge Street | La Crosse, WI 54603 |
| 1199 | 26 | 1612 Nakomis Avenue | La Crosse, WI 54603 |
| 1200 | 26 | 1611 Nakomis Ave | La Crosse, WI 54603 |
| 1203 | 24 | 1315 Caroline Street | La Crosse, WI 54603 |

**Table 2**
**PFAS Analytical Parameters**
Campbell, Wisconsin

| # | Acronym | Name | CAS # | Acronyms (other) |
|---|---|---|---|---|
| **Carboxylic Acids** | | | | |
| 1 | PFBA | Perfluorobutanoic acid | 375-22-4 | |
| 2 | PFPeA | Perfluoropentanoic acid | 2706-90-3 | |
| 3 | PFHxA | Perfluorohexanoic acid | 307-24-4 | |
| 4 | PFHpA | Perfluoroheptanoic acid | 375-85-9 | |
| 5 | PFOA | Perfluorooctanoic acid | 335-67-1 | |
| 6 | PFNA | Perfluorononanoic acid | 375-95-1 | |
| 7 | PFDA | Perfluorodecanoic acid | 335-76-2 | |
| 8 | PFUnA | Perfluoroundecanoic acid | 2058-94-8 | PFUdA, PFUnDA |
| 9 | PFDoA | Perfluorododecanoic acid | 307-55-1 | PFDoDA |
| 10 | PFTriA | Perfluorotridecanoic acid | 72629-94-8 | PFTrA, PFTrDA |
| 11 | PFTeA | Perfluorotetradecanoic acid | 376-06-7 | PFTeDA |
| 12 | PFHxDA | Perfluorohexadecanoic acid | 67905-19-5 | |
| 13 | PFODA | Perfluorooctadecanoic acid | 16517-11-6 | |
| **Sulfonic Acids** | | | | |
| 14 | PFBS | Perfluorobutanesulfonic acid | 375-73-5 | |
| 15 | PFPeS | Perfluoropentanesulfonic acid | 2706-91-4 | |
| 16 | PFHxS | Perfluorohexanesulfonic acid | 355-46-4 | |
| 17 | PFHpS | Perfluoroheptanesulfonic acid | 375-92-8 | |
| 18 | PFOS | Perfluorooctanesulfonic acid | 1763-23-1 | |
| 19 | PFNS | Perfluorononanesulfonic acid | 68259-12-1 | |
| 20 | PFDS | Perfluorodecanesulfonic acid | 335-77-3 | |
| 21 | PFDoS | Perfluorododecanesulfonic acid | 79780-39-5 | PFDoDS |
| 22 | 4:2 FTSA | 4:2 Fluorotelomer sulfonic acid | 757124-72-4 | |
| 23 | 6:2 FTSA | 6:2 Fluorotelomer sulfonic acid | 27619-97-2 | |
| 24 | 8:2 FTSA | 8:2 Fluorotelomer sulfonic acid | 39108-34-4 | |
| 25 | 10:2 FTSA | 10:2 Fluorotelomer sulfonic acid | 120226-60-0 | |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | |
| 26 | FOSA | Perfluorooctane sulfonamide | 754-91-6 | PFOSA |
| 27 | NMeFOSA | N-Methyl perfluorooctane sulfonamide | 31506-32-8 | MeFOSA |
| 28 | NEtFOSA | N-Ethyl perfluorooctane sulfonamide | 4151-50-2 | EtFOSA |
| 29 | NMeFOSAA | N-Methyl perfluorooctane sulfonamidoacetic acid | 2355-31-9 | MeFOSAA |
| 30 | NEtFOSAA | N-Ethyl perfluorooctane sulfonamidoacetic acid | 2991-50-6 | EtFOSAA |
| 31 | NMeFOSE | N-Methyl perfluorooctane sulfonamidoethanol | 24448-09-7 | MeFOSE |
| 32 | NEtFOSE | N-Ethyl perfluorooctane sulfonamidoethanol | 1691-99-2 | EtFOSE |
| **Replacement Chemicals** | | | | |
| 33 | HFPO-DA | Hexafluoropropylene oxide dimer acid [1] | 13252-13-6 | PFPrOPrA |
| 34 | DONA | 4,8-Dioxa-3H-perfluorononanoic acid 2 | 919005-14-4 | |
| 35 | 9Cl-PF3ONS | 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid 3 | 756426-58-1 | F-53B Major |
| 36 | 11Cl-PF3OUdS | 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid 4 | 763051-92-9 | F-53B Minor |

**NOTES**

1 - Also referred to as "GenX"

2 - Also available as the ammonium salt = ADONA (Ammonium 4,8-dioxa-3H-perfluorononanoate) # 958445-44-8

3 - Also available as the potassium salt = Potassium, 9-chlorohexadecafluoro-3-oxanone-1-sulfonate # 73606-19-6

4 - Also available as the potassium salt = Potassium, 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate # 83329-89-9

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1001 | 1002 | 1003 | 1004 | 1005 | 1005 | 1006 | 1007 | 1008 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/28/21 | 04/19/21 | 04/20/21 | 04/19/21 | 04/27/21 | 04/27/21 | 04/20/21 | 04/21/21 | 04/19/21 |
| | | | Sample Number | PWS1001-OS-042821-100 | PWS1002-OS-041921-100 | PWS1003-IS-042021-100 | PWS1004-OS-041921-100 | PWS1005-OS-042721-100 | PWS-FD01-042721 | PWS1006-OS-042021-100 | PWS1007-OS-042121-100 | PWS1008-OS-041921-100 |
| | | | Address | 1006 Hanson Road | 1009 Hanson Road | 3107 Edgewater Drive | 3107 Lakeshore Drive | 3115 Lakeshore Drive | 3115 Lakeshore Drive | 3114 Youngdale Avenue | 731 Lancaster Street | 801 Lancaster Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **6.0** | **2.2 J** | **14** | **25** | **14** | **15** | **13** | **17** | **17** |
| PFPeA | ng/L | -- | <0.47 U | <0.41 U | <0.43 U | **1.2 J** | <0.46 U | <0.46 U | <0.46 U | <0.49 U | <0.42 U |
| PFHxA | ng/L | 150,000 | **0.99 J** | <0.48 U | <0.51 U | **1.5 J** | **0.54 JI** | **0.55 J** | <0.54 U | <0.58 U | <0.50 U |
| PFHpA | ng/L | -- | <0.24 U | <0.21 U | <0.22 U | **1.2 J** | <0.23 U | <0.23 U | <0.23 U | <0.25 U | <0.21 U |
| PFOA | ng/L | 20 | <0.81 U | <0.71 U | **2.0** | **7.6** | **1.6 J** | **1.6 J** | **1.3 J** | **1.8 J** | **3.2** |
| PFNA | ng/L | 30 | <0.26 U | <0.23 U | <0.24 U | **0.69 J** | **0.44 J** | **0.42 J** | **0.72 J** | **0.84 J** | **0.55 J** |
| PFDA | ng/L | 300 | <0.30 U | <0.26 U | <0.27 U | <0.25 U | **0.54 J** | **0.51 J** | <0.29 U | <0.31 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <1.1 U | <0.92 U | <0.96 U | <0.90 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <0.95 U |
| PFDoA | ng/L | 500 | <0.53 U | <0.46 U | <0.48 U | <0.45 U | <0.51 U | <0.51 U | <0.52 U | <0.55 U | <0.47 U |
| PFTriA | ng/L | -- | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.70 U | <0.61 U | <0.64 U | <0.59 U | <0.68 U | <0.68 U | <0.68 U | <0.73 U | <0.63 U |
| PFHxDA | ng/L | -- | <0.85 U | <0.74 U | <0.78 U | <0.72 U | <0.83 U | <0.83 U | <0.83 U | <0.89 U | <0.76 U |
| PFODA | ng/L | 400,000 | <0.90 U | <0.78 U | <0.82 U | <0.77 U | <0.87 U | <0.88 U | <0.88 U | <0.94 U | <0.81 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.87 J** | **0.81 J** | **7.9** | **2.1** | **3.9** | **4.2** | **5.2** | **4.6** | **5.0** |
| PFPeS | ng/L | -- | <0.29 U | <0.25 U | **1.2 J** | **0.38 J** | **0.37 J** | **0.30 J** | **0.55 J** | **0.39 J** | **0.47 J** |
| PFHxS | ng/L | 40 | **0.60 J** | <0.48 U | **2.6** | **1.9** | **1.6 J** | **1.6 J** | **2.0** | **1.4 J** | **1.8** |
| PFHpS | ng/L | -- | <0.18 U | <0.16 U | <0.17 U | **0.38 J** | <0.18 U | <0.18 U | <0.18 U | <0.19 U | <0.16 U |
| PFOS | ng/L | 20 | **1.9** | **0.97 J** | **12** | **13** | **9.3 B** | **9.4 B** | **12** | **10** | **10** |
| PFNS | ng/L | -- | <0.35 U | <0.31 U | <0.32 U | <0.30 U | <0.34 U | <0.35 U | <0.35 U | <0.37 U | <0.32 U |
| PFDS | ng/L | -- | <0.31 U | <0.27 U | <0.28 U | <0.26 U | <0.30 U | <0.30 U | <0.30 U | <0.32 U | <0.27 U |
| PFDoS | ng/L | -- | <0.93 U | <0.81 U | <0.85 U | <0.79 U | <0.90 U | <0.91 U | <0.91 U | <0.97 U | <0.83 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.20 U | <0.21 U | <0.20 U | <0.22 U | <0.22 U | <0.23 U | <0.24 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.1 U | <2.2 U | <2.0 U | <2.3 U | <2.3 U | <2.3 U | <2.5 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.44 U | <0.38 U | <0.40 U | <0.37 U | <0.43 U | <0.43 U | <0.43 U | <0.46 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.64 U | <0.56 U | <0.59 U | <0.55 U | <0.62 U | <0.63 U | <0.63 U | <0.67 U | <0.58 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.94 U | <0.82 U | <0.86 U | <0.80 U | <0.91 U | **0.98 J** | <0.92 U | <0.98 U | **0.95 J** |
| NMeFOSA | ng/L | -- | <0.41 U | <0.36 U | <0.38 U | <0.35 U | <0.40 U | <0.40 U | <0.40 U | <0.43 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.83 U | <0.73 U | <0.76 U | <0.71 U | <0.81 U | <0.81 U | <0.82 U | <0.87 U | <0.75 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.0 U | <1.1 U | <0.98 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.2 U | <1.2 U | <1.1 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.81 U | <0.71 U | <0.74 U | <0.69 U | <0.79 U | <0.80 U | <0.80 U | <0.85 U | <0.73 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.3 U | <1.3 U | <1.2 U | <1.4 U | <1.4 U | <1.4 U | <1.5 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.38 U | <0.33 U | <0.35 U | <0.33 U | <0.37 U | <0.37 U | <0.38 U | <0.40 U | <0.34 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.20 U | <0.21 U | <0.20 U | <0.22 U | <0.22 U | <0.23 U | <0.24 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.31 U | <0.27 U | <0.28 U | <0.26 U | <0.30 U | <0.30 U | <0.30 U | <0.32 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **1.9** | **0.97** | **14** | **20.6** | **10.9** | **11** | **13.3** | **11.8** | **13.2** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.9** | **0.97** | **14** | **20.6** | **10.9** | **11.98** | **13.3** | **11.8** | **14.15** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.0 | 0.8 | 1.1 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/19/21 | 04/19/21 | 04/27/21 | 04/19/21 | 04/29/21 | 04/29/21 | 04/19/21 | 04/19/21 | 04/23/21 |
| | | | Sample Number | PWS-FD01-041921 | PWS1009-OS-041921-100 | PWS1010-IS-042721-100 | PWS1011-OS-041921-100 | PWS1012-OS-042921-100 | PWS1013-OS-042921-100 | PWS1014-OS-041921-100 | PWS1015-OS-041921-100 | PWS1016-OS-042122-100 |
| | | | Address | 801 Lancaster Street | 3131 Howry Avenue | 3054 Edgewater Lane | 3050 Edgewater Lane | 3045 Edgewater Lane | 3057 Edgewater Lane | 3041 Lakeshore Drive | 805 Miller Place | 3046 Youngdale Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | | **18** | **5.1** | **7.3** | **4.1 J** | **12** | **5.9** | **17** | **18** | **35** |
| PFPeA | ng/L | -- | | <0.43 U | <0.41 U | <0.40 U | <0.44 U | <0.46 U | <0.47 U | <0.41 U | <0.43 U | **6.4** |
| PFHxA | ng/L | 150,000 | | <0.51 U | <0.49 U | <0.47 U | <0.52 U | <0.55 U | <0.55 U | **0.56 J** | <0.51 U | **5.3** |
| PFHpA | ng/L | -- | | <0.22 U | <0.21 U | <0.20 U | <0.22 U | <0.24 U | <0.24 U | <0.21 U | <0.22 U | **2.9** |
| PFOA | ng/L | 20 | | **3.1** | **1.8** | **0.84 J** | <0.76 U | **2.1** | **1.3 J** | **2.4** | **2.5** | **14** |
| PFNA | ng/L | 30 | | **0.44 J** | **0.34 J** | **0.53 J** | <0.24 U | <0.25 U | <0.26 U | **0.73 J** | <0.24 U | <0.26 U |
| PFDA | ng/L | 300 | | <0.27 U | <0.26 U | **0.59 J** | <0.28 U | <0.29 U | <0.30 U | <0.26 U | **0.57 JI** | <0.30 U |
| PFUnA | ng/L | 3,000 | | <0.96 U | <0.93 U | <0.90 U | <0.98 U | <1.0 U | <1.0 U | <0.91 U | <0.97 U | <1.1 U |
| PFDoA | ng/L | 500 | | <0.48 U | <0.47 U | <0.45 U | <0.49 U | <0.52 U | <0.52 U | <0.46 U | <0.48 U | <0.53 U |
| PFTriA | ng/L | -- | | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.3 U |
| PFTeA | ng/L | 10,000 | | <0.64 U | <0.62 U | <0.59 U | <0.65 U | <0.69 U | <0.70 U | <0.60 U | <0.64 U | <0.70 U |
| PFHxDA | ng/L | -- | | <0.78 U | <0.75 U | <0.72 U | <0.80 U | <0.84 U | <0.85 U | <0.74 U | <0.78 U | <0.86 U |
| PFODA | ng/L | 400,000 | | <0.82 U | <0.80 U | <0.77 U | <0.84 U | <0.88 U | <0.90 U | <0.78 U | <0.83 U | <0.91 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | | **5.7** | **2.4** | **1.7** | **1.9** | **1.5 J** | **1.1 JI** | **5.7** | **4.0** | **6.3** |
| PFPeS | ng/L | -- | | **0.57 JI** | **0.44 J** | <0.24 U | <0.27 U | <0.28 U | <0.29 U | **0.64 J** | **0.51 J** | **0.93 J** |
| PFHxS | ng/L | 40 | | **2.1** | **1.5 J** | **0.81 J** | **0.63 J** | **0.55 J** | **0.63 J** | **2.3** | **2.8** | **11** |
| PFHpS | ng/L | -- | | <0.17 U | <0.16 U | <0.15 U | <0.17 U | <0.18 U | <0.18 U | <0.16 U | **0.22 J** | **0.71 J** |
| PFOS | ng/L | 20 | | **11** | **6.9** | **7.1** | **4.9** | **3.0** | **4.2** | **11** | **13** | **9.9** |
| PFNS | ng/L | -- | | <0.32 U | <0.31 U | <0.30 U | <0.33 U | <0.35 U | <0.35 U | <0.31 U | <0.33 U | <0.36 U |
| PFDS | ng/L | -- | | <0.28 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.30 U | <0.27 U | <0.28 U | <0.31 U |
| PFDoS | ng/L | -- | | <0.85 U | <0.82 U | <0.79 U | <0.87 U | <0.91 U | <0.92 U | <0.80 U | <0.85 U | <0.93 U |
| 4:2 FTSA | ng/L | -- | | <0.21 U | <0.20 U | <0.20 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U | <0.21 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | | <2.2 U | <2.1 U | <2.0 U | <2.2 U | <2.4 U | <2.4 U | <2.1 U | <2.2 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | | <0.40 U | <0.39 U | <0.37 U | <0.41 U | <0.43 U | <0.44 U | <0.38 U | <0.40 U | <0.44 UF1 |
| 10:2 FTSA | ng/L | -- | | <0.59 U | <0.57 U | <0.55 U | <0.60 U | <0.63 U | <0.64 U | <0.56 U | <0.59 U | <0.65 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | | **1.4 J** | **0.84 J** | <0.80 U | <0.88 U | <0.92 U | <0.93 U | **1.1 J** | <0.86 U | **2.5** |
| NMeFOSA | ng/L | -- | | <0.38 U | <0.36 U | <0.35 U | <0.38 U | <0.40 U | <0.41 U | <0.36 U | <0.38 U | <0.41 U |
| NEtFOSA | ng/L | 20 | | <0.76 U | <0.74 U | <0.71 U | <0.78 U | <0.82 U | <0.83 U | <0.72 U | <0.77 U | <0.84 U |
| NMeFOSAA | ng/L | -- | | <1.0 U | <1.0 U | <0.98 U | <1.1 U | <1.1 U | <1.1 U | <0.99 U | <1.1 U | <1.2 U |
| NEtFOSAA | ng/L | 20 | | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.3 U |
| NMeFOSE | ng/L | -- | | <1.2 U | <1.2 U | <1.1 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U |
| NEtFOSE | ng/L | 20 | | <0.74 U | <0.72 U | <0.69 U | <0.76 U | <0.80 U | <0.81 U | <0.70 U | <0.75 U | <0.82 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.4 U | <1.4 U | <1.2 U | <1.3 U | <1.4 U |
| DONA | ng/L | 3,000 | | <0.35 U | <0.34 U | <0.33 U | <0.36 U | <0.38 U | <0.38 U | <0.33 U | <0.35 U | <0.39 U |
| 9Cl-PF3ONS | ng/L | -- | | <0.21 U | <0.20 U | <0.20 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U | <0.21 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | | <0.28 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.30 U | <0.27 U | <0.28 U | <0.31 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | | **14.1** | **8.7** | **7.94** | **4.9** | **5.1** | **5.5** | **13.4** | **15.5** | **23.9** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | | **15.5** | **9.54** | **7.94** | **4.9** | **5.1** | **5.5** | **14.5** | **15.5** | **26.4** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | | 0.8 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.8 | 0.8 | 1.6 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1017 | 1018 | 1019 | 1020 | 1020 | 1021 | 1022 | 1023 | 1024 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/20/21 | 04/19/21 | 04/30/21 | 04/20/21 | 04/20/21 | 04/20/21 | 04/20/21 | 04/30/21 | 04/20/21 |
| | | Sample Number | PWS1017-OS-042021-100 | PWS1018-OS-041921-100 | PWS1019-OS-043021-100 | PWS1020-OS-042021-100 | PWS-FD01-042021 | PWS1021-OS-042021-100 | PWS1022-OS-042021-100 | PWS1023-OS-043021-100 | PWS1024-OS-042021-100 |
| | | Address | 810 Lori Place | 2932 Youngdale Avenue | 2928 Pierce Avenue | 2906 Pierce Avenue | 2906 Pierce Avenue | 2921 Youngdale Avenue | 2923 Youngdale Avenue | 3018 Youngdale Avenue | 3014 Youngdale Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **14** | **38** | **8.7** | **7.6** | **7.5** | **19** | **18** | **18** | **29** |
| PFPeA | ng/L | -- | **1.1 J** | **3.3** | <0.45 U | <0.41 U | <0.45 U | <0.46 U | <0.47 U | <0.45 U | **3.9** |
| PFHxA | ng/L | 150,000 | **1.2 J** | **2.4** | <0.53 U | <0.49 U | <0.53 U | **0.83 J** | <0.56 U | **0.89 J** | **3.1** |
| PFHpA | ng/L | -- | <0.23 U | **1.5 J** | <0.23 U | <0.21 U | <0.23 U | <0.24 U | <0.24 U | <0.23 U | **1.1 J** |
| PFOA | ng/L | 20 | **2.1** | **8.4** | <0.78 U | <0.72 U | <0.77 U | **3.3** | <0.81 U | **3.5** | **8.0** |
| PFNA | ng/L | 30 | **0.56 J** | <0.22 U | **0.42 J** | <0.23 U | <0.25 U | <0.26 U | **0.55 J** | <0.25 U | <0.25 U |
| PFDA | ng/L | 300 | <0.28 U | <0.26 U | <0.29 U | <0.26 U | <0.28 U | <0.29 U | <0.30 U | <0.28 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <0.91 U | <1.0 U | <0.93 U | <1.0 U | <1.0 U | <1.1 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.50 U | <0.46 U | <0.51 U | <0.46 U | <0.50 U | <0.52 U | <0.53 U | <0.50 U | <0.51 U |
| PFTriA | ng/L | -- | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.66 U | <0.60 U | <0.67 U | <0.62 U | <0.66 U | <0.69 U | <0.70 U | <0.67 U | <0.68 U |
| PFHxDA | ng/L | -- | <0.81 U | <0.74 U | <0.82 U | <0.75 U | <0.81 U | <0.84 U | <0.85 U | <0.81 U | <0.82 U |
| PFODA | ng/L | 400,000 | <0.85 U | <0.78 U | <0.86 U | <0.79 U | <0.85 U | <0.89 U | <0.90 U | <0.86 U | <0.87 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **9.4** | **6.8** | **1.8** | **13** | **15** | **11** | **5.2** | **5.6** | **6.9** |
| PFPeS | ng/L | -- | **0.43 J** | **0.58 J** | <0.28 U | **0.26 J** | **0.28 J** | **0.51 J** | **0.36 J** | **0.52 J** | **0.85 J** |
| PFHxS | ng/L | 40 | **1.7 J** | **4.3** | **0.87 J** | **1.0 J** | **1.1 J** | **5.8** | **1.9** | **2.4** | **2.8** |
| PFHpS | ng/L | -- | <0.17 U | **0.23 J** | <0.17 U | <0.16 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U | <0.18 U |
| PFOS | ng/L | 20 | **11** | **9.6** | **6.7** | **4.8** | **5.2** | **6.4** | **8.6** | **16** | **12** |
| PFNS | ng/L | -- | <0.34 U | <0.31 U | <0.34 U | <0.31 U | <0.34 U | <0.35 U | <0.35 U | <0.34 U | <0.34 U |
| PFDS | ng/L | -- | <0.29 U | <0.26 U | <0.29 U | <0.27 U | <0.29 U | <0.30 U | <0.31 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.88 U | <0.80 U | <0.89 U | <0.82 U | <0.88 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.20 U | <0.22 U | <0.20 U | <0.22 U | <0.23 U | <0.23 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.1 U | <2.3 U | <2.1 U | <2.3 U | <2.4 U | <2.4 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.42 U | <0.38 U | <0.42 U | <0.39 U | <0.42 U | <0.43 U | <0.44 U | <0.42 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | <0.61 U | <0.55 U | <0.62 U | <0.57 U | <0.61 U | <0.63 U | <0.64 U | <0.61 U | <0.62 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.8** | <0.81 U | <0.90 U | <0.83 U | <0.89 U | <0.93 U | <0.94 U | **1.5 J** | <0.91 U |
| NMeFOSA | ng/L | -- | <0.39 U | <0.36 U | <0.40 U | <0.36 U | <0.39 U | <0.41 U | <0.41 U | <0.39 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.79 U | <0.72 U | <0.80 U | <0.73 U | <0.79 U | <0.82 U | <0.83 U | <0.79 U | <0.80 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <0.99 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.77 U | <0.70 U | <0.78 U | <0.72 U | <0.77 U | <0.80 U | <0.81 U | <0.77 U | <0.79 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.2 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.33 U | <0.37 U | <0.34 U | <0.36 U | <0.38 U | <0.38 U | <0.36 U | <0.37 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.20 U | <0.22 U | <0.20 U | <0.22 U | <0.23 U | <0.23 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.26 U | <0.29 U | <0.27 U | <0.29 U | <0.30 U | <0.31 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **13.1** | **18** | **6.7** | **4.8** | **5.2** | **9.7** | **8.6** | **19.5** | **20** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **14.9** | **18** | **6.7** | **4.8** | **5.2** | **9.7** | **8.6** | **21** | **20** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 0.8 | 1.0 | 0.4 | 0.3 | 0.3 | 0.6 | 0.5 | 1.1 | 1.1 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1030 | 1031 | 1032 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/20/21 | 04/20/21 | 04/20/21 | 04/20/21 | 04/25/21 | 04/23/21 | 04/23/21 | 04/21/21 | 04/21/21 |
| | | | Sample Number | PWS1025-OS-042021-100 | PWS1026-OS-042021-100 | PWS1027-OS-042021-100 | PWS1028-OS-042021-100 | PWS1029-OS-042521-100 | PWS1030-OS-042321-100 | PWS-FD01-042321 | PWS1031-OS-042121-100 | PWS1032-OS-042121-100 |
| | | | Address | 3001 Youngdale Avenue | 812 Kelly Place | 3013 Youngdale Avenue | 2922 Bayshore Drive | 2711 Bayshore Drive | 2822 Bayshore Drive | 2822 Bayshore Drive | 2812 Bayshore Drive | 2718 Bayshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **16** | **18** | **20** | **2.4 J** | **3.4 J** | **15** | **15** | **17** | **6.1** |
| PFPeA | ng/L | -- | **1.4 J** | <0.50 U | **3.7** | <0.45 U | <0.42 U | **1.9** | **2.4** | **0.77 J** | <0.45 U |
| PFHxA | ng/L | 150,000 | **0.67 J** | <0.59 U | **3.4 I** | <0.54 U | <0.50 U | **2.0** | **1.7 J** | **0.54 J** | <0.54 U |
| PFHpA | ng/L | -- | <0.23 U | <0.25 U | **1.2 J** | <0.23 U | <0.21 U | <0.22 U | <0.23 U | <0.23 U | <0.23 U |
| PFOA | ng/L | 20 | **2.3** | **1.6 J** | **12** | <0.79 U | <0.73 U | **5.4** | **5.2** | **1.3 J** | <0.79 U |
| PFNA | ng/L | 30 | <0.25 U | <0.27 U | <0.25 U | <0.25 U | **0.31 J** | <0.24 U | **0.50 J** | **0.33 J** | **0.41 J** |
| PFDA | ng/L | 300 | <0.29 U | <0.31 U | <0.28 U | <0.29 U | **0.70 J** | <0.28 U | <0.29 U | **0.52 J** | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.1 U | <1.0 U | <1.0 U | <0.94 U | <0.99 U | <1.0 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.51 U | <0.56 U | <0.50 U | <0.51 U | <0.47 U | <0.49 U | <0.51 U | <0.50 U | <0.51 U |
| PFTriA | ng/L | -- | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.67 U | <0.74 U | <0.67 U | <0.68 U | <0.62 U | <0.66 U | <0.68 U | <0.67 U | <0.67 U |
| PFHxDA | ng/L | -- | <0.82 U | <0.90 U | <0.82 U | <0.82 U | <0.76 U | <0.80 U | <0.83 U | <0.81 U | <0.82 U |
| PFODA | ng/L | 400,000 | <0.86 U | <0.95 U | <0.86 U | <0.87 U | <0.80 U | <0.85 U | <0.87 U | <0.86 U | <0.87 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **6.5** | **5.1** | **21** | **0.73 J** | **2.4** | **2.8** | **2.5** | **3.7** | **1.3 J** |
| PFPeS | ng/L | -- | **0.59 J** | **0.47 J** | **0.67 J** | <0.28 U | <0.26 U | **0.42 J** | **0.73 J** | **0.63 J** | <0.28 U |
| PFHxS | ng/L | 40 | **2.6** | **1.6 J** | **9.7** | <0.53 U | **0.60 J** | **3.3** | **3.4** | **2.8** | <0.53 U |
| PFHpS | ng/L | -- | <0.17 U | <0.19 U | <0.17 U | <0.18 U | <0.16 U | <0.17 U | <0.18 U | <0.17 U | <0.18 U |
| PFOS | ng/L | 20 | **13** | **8.7** | **20** | **2.5** | **2.6** | **7.6** | **8.3** | **5.7** | **2.9** |
| PFNS | ng/L | -- | <0.34 U | <0.38 U | <0.34 U | <0.34 U | <0.32 U | <0.33 U | <0.34 U | <0.34 U | <0.34 U |
| PFDS | ng/L | -- | <0.29 U | <0.33 U | <0.29 U | <0.30 U | <0.27 U | <0.29 U | <0.30 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.89 U | <0.99 U | <0.89 U | <0.90 U | <0.83 U | <0.87 U | <0.90 U | <0.89 U | <0.90 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.24 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.5 U | <2.3 U | <2.3 U | <2.1 U | <2.2 U | <2.3 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.42 U | <0.47 U | <0.42 U | <0.43 U | <0.39 U | <0.41 U | <0.43 U | <0.42 U | <0.42 U |
| 10:2 FTSA | ng/L | -- | <0.62 U | <0.68 U | <0.61 U | <0.62 U | <0.57 U | <0.60 U | <0.62 U | <0.61 U | <0.62 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.90 U | <1.0 U | <0.90 U | <0.91 U | <0.84 U | **1.1 J** | **1.5 J** | <0.90 U | <0.91 U |
| NMeFOSA | ng/L | -- | <0.40 U | <0.44 U | <0.39 U | <0.40 U | <0.37 U | <0.39 U | <0.40 U | <0.39 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.80 U | <0.88 U | <0.80 U | <0.81 U | <0.74 U | <0.78 U | <0.81 U | <0.79 U | <0.80 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.78 U | <0.86 U | <0.78 U | <0.79 U | <0.73 U | <0.76 U | <0.79 U | <0.78 U | <0.79 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.5 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.41 U | <0.37 U | <0.37 U | <0.34 U | <0.36 U | <0.37 U | <0.37 U | <0.37 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.24 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.33 U | <0.29 U | <0.30 U | <0.27 U | <0.29 U | <0.30 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **15.3** | **10.3** | **32** | **2.5** | **2.6** | **13** | **13.5** | **7** | **2.9** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **15.3** | **10.3** | **32** | **2.5** | **2.6** | **14.1** | **15** | **7** | **2.9** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.8 | 0.6 | 1.8 | 0.1 | 0.2 | 0.8 | 0.9 | 0.4 | 0.2 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1038 | 1039 | 1040 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/21/21 | 04/30/21 | 04/21/21 | 04/30/21 | 04/23/21 | 04/21/21 | 04/21/21 | 04/23/21 | 04/21/21 |
| | | | Sample Number | PWS1033-OS-042121-100 | PWS1034-IS-043021-100 | PWS1035-OS-042121-100 | PWS1036-OS-043021-100 | PWS1037-OS-042321-100 | PWS1038-OS-042121-100 | PWS-FD01-042121 | PWS1039-OS-042321-100 | PWS1040-OS-042121-100 |
| | | | Address | 811 Richmond Avenue | 2905 Pierce Avenue | 2729 Bayshore Drive | 3017 Edgewater Lane | 2906 Bayshore Drive | 904 Spillway Drive | 904 Spillway Drive | 814 Spillway Drive | 822 Richmond Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **9.8** | **11** | **3.5 J** | **7.9** | **18** | **7.8** | **7.7** | **14** | **10** |
| PFPeA | ng/L | -- | <0.46 U | <0.46 U | <0.46 U | <0.46 U | **0.98 J** | <0.48 U | <0.45 U | **1.0 J** | <0.46 U |
| PFHxA | ng/L | 150,000 | <0.55 U | **1.5 J** | <0.55 U | **0.90 J** | **0.80 J** | <0.56 U | <0.53 U | **0.90 J** | <0.55 U |
| PFHpA | ng/L | -- | <0.24 U | <0.24 U | <0.24 U | <0.24 U | <0.23 U | <0.24 U | <0.23 U | <0.22 U | <0.24 U |
| PFOA | ng/L | 20 | <0.80 U | **3.3** | <0.81 U | **2.1** | **1.8** | <0.83 U | <0.78 U | **2.7** | <0.80 U |
| PFNA | ng/L | 30 | **0.40 J** | <0.25 U | **0.34 J** | <0.26 U | <0.24 U | **0.46 J** | **0.41 J** | <0.24 U | **0.41 JI** |
| PFDA | ng/L | 300 | **0.36 J** | <0.29 U | **0.46 J** | <0.29 U | <0.28 U | <0.30 U | **0.55 J** | <0.28 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <1.0 U | <0.99 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.52 U | <0.52 U | <0.52 U | <0.52 U | <0.50 U | <0.53 U | <0.51 U | <0.49 U | <0.52 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.69 U | <0.69 U | <0.69 U | <0.69 U | <0.66 U | <0.71 U | <0.67 U | <0.66 U | <0.69 U |
| PFHxDA | ng/L | -- | <0.84 U | <0.84 U | <0.84 U | <0.84 U | <0.81 U | <0.86 U | <0.82 U | <0.80 U | <0.84 U |
| PFODA | ng/L | 400,000 | <0.89 U | <0.89 U | <0.89 U | <0.89 U | <0.85 U | <0.91 U | <0.87 U | <0.84 U | <0.89 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.7** | **4.5** | **1.4 J** | **1.4 J** | **2.9** | **2.4** | **2.4** | **2.8** | **4.2** |
| PFPeS | ng/L | -- | **0.31 J** | **0.32 J** | <0.28 U | <0.28 U | **0.52 J** | <0.29 U | **0.31 J** | **0.81 J** | <0.28 U |
| PFHxS | ng/L | 40 | **6.9** | **1.6 J** | <0.54 U | **0.75 J** | **1.8** | **1.2 J** | **0.95 J** | **5.1** | **1.0 J** |
| PFHpS | ng/L | -- | <0.18 U | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U | <0.18 U |
| PFOS | ng/L | 20 | **7.7** | **6.9** | **1.5 J** | **1.4 J** | **3.6** | **4.2** | **3.8** | **2.2** | **4.4** |
| PFNS | ng/L | -- | <0.35 U | <0.35 U | <0.35 U | <0.35 U | <0.34 U | <0.36 U | <0.34 U | <0.33 U | <0.35 U |
| PFDS | ng/L | -- | <0.30 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U | <0.29 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.92 U | <0.91 U | <0.92 U | <0.92 U | <0.88 U | <0.94 U | <0.89 U | <0.87 U | <0.92 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.4 U | <2.4 U | <2.4 U | <2.3 U | <2.4 U | <2.3 U | <2.2 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | <0.44 U | <0.43 U | <0.44 U | <0.44 U | <0.42 U | <0.45 U | <0.42 U | <0.41 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.63 U | <0.63 U | <0.64 U | <0.61 U | <0.65 U | <0.62 U | <0.60 U | <0.63 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.93 U | **1.5 J** | <0.93 U | **1.0 J** | **2.9** | <0.95 U | <0.90 U | **2.4** | <0.93 U |
| NMeFOSA | ng/L | -- | <0.41 U | <0.41 U | <0.41 U | <0.41 U | <0.39 U | <0.42 U | <0.40 U | <0.39 U | <0.41 U |
| NEtFOSA | ng/L | 20 | <0.82 U | <0.82 U | <0.82 U | <0.83 U | <0.79 U | <0.84 U | <0.80 U | <0.78 U | <0.82 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.80 U | <0.80 U | <0.81 U | <0.81 U | <0.77 U | <0.83 U | <0.78 U | <0.76 U | <0.80 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.5 U | <1.4 U | <1.3 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.38 U | <0.38 U | <0.38 U | <0.38 U | <0.36 U | <0.39 U | <0.37 U | <0.36 U | <0.38 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U | <0.29 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **7.7** | **10.2** | **1.5** | **3.5** | **5.4** | **4.2** | **3.8** | **4.9** | **4.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **7.7** | **11.7** | **1.5** | **4.5** | **8.3** | **4.2** | **3.8** | **7.3** | **4.4** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 0.6 | 0.1 | 0.2 | 0.5 | 0.3 | 0.2 | 0.5 | 0.3 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/23/21 | 04/27/21 | 04/21/21 | 04/30/21 | 04/23/21 | 04/25/21 | 04/22/21 | 04/22/21 | 04/22/21 |
| | | | Sample Number | PWS1041-OS-042321-100 | PWS1042-OS-042721-100 | PWS1043-OS-042121-100 | PWS1044-OS-043021-100 | PWS1045-OS-042321-100 | PWS1046-OS-042521-100 | PWS1047-OS-042221-100 | PWS1048-OS-042221-100 | PWS1049-OS-042122-100 |
| | | | Address | 810 Lakeview Drive | 701 Spillway Drive | 901 Spillway Drive | 709 Spillway Drive | 2815 Marion Street | 2810 Lakeshore Drive | 2741 Grand Avenue | 502 Winona Street | 2747 Del Ray Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **21** | **16** | **11** | **19** | **57** | **21** | **110** | **57** | **39** |
| PFPeA | ng/L | -- | **1.4 J** | **0.48 J** | <0.46 U | **1.6 J** | **7.0** | **5.6** | **11** | **7.3** | **7.1** |
| PFHxA | ng/L | 150,000 | **1.4 J** | **1.0 J** | <0.55 U | **1.5 J** | **6.0** | **6.1** | **8.0** | **4.8** | **5.5** |
| PFHpA | ng/L | -- | **0.67 J** | **0.29 J** | <0.24 U | <0.23 U | **1.2 J** | **3.1** | **2.0** | **1.6 J** | **1.8** |
| PFOA | ng/L | 20 | **1.9** | **2.7** | <0.80 U | **1.2 J** | **30** | **11** | **77** | **29** | **21** |
| PFNA | ng/L | 30 | <0.26 U | **0.24 J** | **0.47 J** | <0.25 U | <0.25 U | <0.22 U | <0.23 U | <0.23 U | <0.23 U |
| PFDA | ng/L | 300 | <0.30 U | <0.26 U | <0.29 U | <0.29 U | <0.29 U | **0.39 J** | <0.26 U | <0.26 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <1.1 U | <0.94 U | <1.0 U | <1.0 U | <1.0 U | <0.92 U | <0.93 U | <0.93 U | <0.92 U |
| PFDoA | ng/L | 500 | <0.53 U | <0.47 U | <0.52 U | <0.51 U | <0.51 U | <0.46 U | <0.46 U | <0.47 U | <0.46 U |
| PFTriA | ng/L | -- | <1.3 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.71 U | <0.62 U | <0.69 U | <0.68 U | <0.68 U | <0.61 U | <0.62 U | <0.62 U | <0.61 U |
| PFHxDA | ng/L | -- | <0.86 U | <0.76 U | <0.84 U | <0.82 U | <0.83 U | <0.74 U | <0.75 U | <0.75 U | <0.74 U |
| PFODA | ng/L | 400,000 | <0.91 U | <0.80 U | <0.89 U | <0.87 U | <0.87 U | <0.78 U | <0.79 U | <0.80 U | <0.79 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **6.0** | **6.5** | **2.9** | **6.7** | **13** | **5.0** | **11** | **6.3** | **3.8** |
| PFPeS | ng/L | -- | **0.50 J** | **0.92 J** | <0.28 U | **0.36 J** | **0.90 J** | **0.58 J** | **2.0** | **1.1 J** | **1.0 J** |
| PFHxS | ng/L | 40 | **1.8 J** | **3.8** | **1.2 J** | **1.3 J** | **5.8** | **7.7** | **7.1** | **4.5** | **6.0** |
| PFHpS | ng/L | -- | <0.18 U | **0.17 JI** | <0.18 U | <0.18 U | <0.18 U | <0.16 U | **0.46 J** | <0.16 U | **0.27 J** |
| PFOS | ng/L | 20 | **6.0** | **13** | **7.7** | **1.8 J** | **20** | **5.7** | **27** | **9.4** | **7.4** |
| PFNS | ng/L | -- | <0.36 U | <0.31 U | <0.35 U | <0.34 U | <0.34 U | <0.31 U | <0.31 U | <0.31 U | <0.31 U |
| PFDS | ng/L | -- | <0.31 U | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.27 U | <0.27 U | <0.27 U | <0.27 U |
| PFDoS | ng/L | -- | <0.94 U | <0.83 U | <0.92 U | <0.90 U | <0.90 U | <0.81 U | <0.82 U | <0.82 U | <0.81 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.20 U | <0.23 U | <0.22 U | <0.22 U | <0.20 U | <0.20 U | <0.20 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.1 U | <2.4 U | <2.3 U | <2.3 U | <2.1 U | <2.1 U | <2.1 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.45 U | <0.39 U | <0.44 U | <0.43 U | <0.43 U | <0.38 U | <0.39 U | <0.39 U | <0.38 U |
| 10:2 FTSA | ng/L | -- | <0.65 U | <0.57 U | <0.63 U | <0.62 U | <0.62 U | <0.56 U | <0.57 U | <0.57 U | <0.56 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.8 J** | **2.6** | <0.93 U | **1.1 J** | **1.9** | **0.88 J** | **0.95 J** | **1.2 J** | **0.86 J** |
| NMeFOSA | ng/L | -- | <0.42 U | <0.37 U | <0.41 U | <0.40 U | <0.40 U | <0.36 U | <0.36 U | <0.36 U | <0.36 U |
| NEtFOSA | ng/L | 20 | <0.84 U | <0.74 U | <0.82 U | <0.81 U | <0.81 U | <0.72 U | <0.73 U | <0.74 U | <0.73 U |
| NMeFOSAA | ng/L | -- | <1.2 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.3 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.4 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.82 U | <0.72 U | <0.80 U | <0.79 U | <0.79 U | <0.71 U | <0.72 U | <0.72 U | <0.71 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.5 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.39 U | <0.34 U | <0.38 U | <0.37 U | <0.37 U | <0.33 U | <0.34 U | <0.34 U | <0.33 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.20 U | <0.23 U | <0.22 U | <0.22 U | <0.20 U | <0.20 U | <0.20 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.31 U | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.27 U | <0.27 U | <0.27 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **7.9** | **15.7** | **7.7** | **3** | **50** | **16.7** | **104** | **38.4** | **28.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **9.7** | **18.3** | **7.7** | **4.1** | **51.9** | **17.58** | **104.95** | **39.6** | **29.26** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.5 | 1.0 | 0.4 | 0.2 | 2.7 | 1.1 | 5.4 | 2.1 | 1.6 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/22/21 | 04/28/21 | 04/22/21 | 04/27/21 | 04/25/21 | 04/22/21 | 04/22/21 | 04/23/21 | 04/23/21 |
| | | Sample Number | PWS-FD01-042221 | PWS1050-OS-042821-100 | PWS1051-OS-042221-100 | PWS1052-OS-042721-100 | PWS1053-OS-042521-100 | PWS1054-OS-042221-100 | PWS1055-OS-042221-100 | PWS1056-OS-042321-100 | PWS1057-OS-042321-100 |
| | | Address | 2747 Del Ray Avenue | 2717 Del Ray Avenue | 400 Winona Street | 2624 Lakeshore Drive | 2618 Thomas Street | 705 Plainview Road W | 2641 Lakeshore Drive | 2619 Jerald Street | 2612 Hibbard Court |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **40** | **56** | **130** | **36** | **41** | **21** | **20** | **15** | **60** |
| PFPeA | ng/L | -- | **6.7** | **5.2** | **10** | **0.90 J** | <0.41 U | **1.5 J** | <0.42 U | **0.79 J** | **6.0** |
| PFHxA | ng/L | 150,000 | **5.4** | **3.9** | **6.0** | **1.3 J** | <0.48 U | **1.5 J** | **0.74 J** | **1.0 J** | **4.9** |
| PFHpA | ng/L | -- | **1.8** | **0.97 J** | **1.5 J** | **0.41 J** | <0.21 U | **0.55 J** | <0.21 U | <0.23 U | **1.1 J** |
| PFOA | ng/L | 20 | **21** | **21** | **60** | **13** | **4.7** | **3.9** | **2.7** | **2.4** | **24** |
| PFNA | ng/L | 30 | <0.24 U | <0.25 U | <0.25 U | **0.26 J** | **0.34 J** | <0.22 U | <0.23 U | <0.25 U | <0.25 U |
| PFDA | ng/L | 300 | <0.28 U | <0.29 U | <0.28 U | **0.29 J** | **0.65 J** | **0.29 J** | **0.33 J** | <0.28 U | **0.32 J** |
| PFUnA | ng/L | 3,000 | <0.99 U | <1.0 U | <1.0 U | <0.93 U | <0.92 U | <0.92 U | <0.94 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.50 U | <0.52 U | <0.51 U | <0.47 U | <0.46 U | <0.46 U | <0.47 U | <0.50 U | <0.51 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.66 U | <0.69 U | <0.67 U | <0.62 U | <0.61 U | <0.61 U | <0.62 U | <0.67 U | <0.68 U |
| PFHxDA | ng/L | -- | <0.80 U | <0.84 U | <0.82 U | <0.76 U | <0.74 U | <0.74 U | <0.76 U | <0.81 U | <0.83 U |
| PFODA | ng/L | 400,000 | <0.85 U | <0.89 U | <0.86 U | <0.80 U | <0.78 U | <0.78 U | <0.80 U | <0.86 U | <0.87 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.9** | **5.2** | **7.1** | **11** | **16** | **6.5** | **10** | **5.5** | **3.4** |
| PFPeS | ng/L | -- | **0.96 J** | **1.0 J** | **2.5** | **0.81 J** | **1.7** | **0.60 J** | **0.72 J** | **0.58 J** | **1.2 J** |
| PFHxS | ng/L | 40 | **5.7** | **4.3** | **5.9** | **3.5** | **4.6** | **2.2** | **3.2** | **2.4** | **7.1** |
| PFHpS | ng/L | -- | **0.33 J** | <0.18 U | **0.58 J** | **0.24 J** | **0.50 J** | <0.16 U | <0.16 U | <0.17 U | <0.18 U |
| PFOS | ng/L | 20 | **10** | **6.1** | **19** | **16** | **24** | **7.6** | **14** | **8.7** | **7.5** |
| PFNS | ng/L | -- | <0.33 U | <0.35 U | <0.34 U | <0.31 U | <0.31 UF1 | <0.31 U | <0.31 U | <0.34 U | <0.34 U |
| PFDS | ng/L | -- | <0.29 U | <0.30 U | <0.29 U | <0.27 U | <0.27 U | <0.27 U | <0.27 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.87 U | <0.92 U | <0.89 U | <0.82 U | <0.81 U | <0.81 U | <0.83 U | <0.89 U | <0.90 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.23 U | <0.22 U | <0.20 U | <0.20 U | <0.20 U | <0.20 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.4 U | <2.3 U | <2.1 U | <2.1 U | <2.1 U | <2.1 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | **0.53 J** | <0.43 U | <0.42 U | <0.39 U | <0.38 U | <0.38 U | <0.39 U | <0.42 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | **0.97 J** | <0.63 U | <0.62 U | <0.57 U | <0.56 U | <0.56 U | <0.57 U | <0.61 U | <0.62 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **12** | <0.92 U | **1.7 J** | **2.0** | <0.82 U | **1.0 J** | **1.5 J** | **1.2 J** | **3.1** |
| NMeFOSA | ng/L | -- | <0.39 U | <0.41 U | <0.40 U | <0.36 U | <0.36 U | <0.36 U | <0.37 U | <0.39 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.78 U | <0.82 U | <0.80 U | <0.74 U | <0.73 U | <0.72 U | <0.74 U | <0.80 U | <0.81 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | **7.6** | <0.80 U | <0.78 U | <0.72 U | <0.71 U | <0.71 U | <0.72 U | <0.78 U | <0.79 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.38 U | <0.37 U | <0.34 U | <0.33 U | <0.33 U | <0.34 U | <0.37 U | <0.37 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.23 U | <0.22 U | <0.20 U | <0.20 U | <0.20 U | <0.20 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.30 U | <0.29 U | <0.27 U | <0.27 U | <0.27 U | <0.27 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **31** | **27.1** | **79** | **29** | **28.7** | **11.5** | **16.7** | **11.1** | **31.5** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **50.6** | **27.1** | **80.7** | **31** | **28.7** | **12.5** | **18.2** | **12.3** | **34.6** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 2.7 | 1.5 | 4.2 | 1.7 | 1.6 | 0.7 | 1.0 | 0.7 | 1.9 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1064 | 1065 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/23/21 | 04/24/21 | 04/23/21 | 04/23/21 | 04/24/21 | 04/30/21 | 04/24/21 | 04/24/21 | 04/24/21 |
| | | Sample Number | PWS1058-OS-042321-100 | PWS1059-OS-042421-100 | PWS1060-OS-042321-100 | PWS1061-OS-042321-100 | PWS1062-OS-042421-100 | PWS1063-OS-043021-100 | PWS1064-OS-042421-100 | PWS-FD01-042421 | PWS1065-OS-042421-100 |
| | | Address | 405 Central Road | 419 Central Road | 441 Central Road | 445 Central Road | 504 Callaway Boulevard | 414 Callaway Boulevard | 411 Central Road | 411 Central Road | 2513 Western Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **97** | **120** | **81** | **12** | **27** | **190** | **59** | **59** | **52** |
| PFPeA | ng/L | -- | **1.2 J** | **1.1 J** | <0.46 U | <0.45 U | **0.66 J** | <0.46 U | <0.42 U | <0.41 U | **2.2** |
| PFHxA | ng/L | 150,000 | **0.66 J** | **1.1 J** | **0.94 J** | <0.54 U | **1.1 J** | **0.67 J** | <0.50 U | <0.49 U | <2.6 UG |
| PFHpA | ng/L | -- | <0.23 U | <0.22 U | **0.52 J** | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.21 U | **0.70 J** |
| PFOA | ng/L | 20 | **12** | **22** | **6.6** | <0.79 U | **4.5** | **6.2** | **2.0** | **2.3** | **6.3** |
| PFNA | ng/L | 30 | <0.25 U | <0.24 U | <0.26 U | <0.25 U | <0.24 U | <0.25 U | <0.23 U | <0.23 U | <0.23 U |
| PFDA | ng/L | 300 | <0.28 U | <0.28 U | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.27 U | <0.26 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <0.99 U | <1.0 U | <1.0 U | <0.98 U | <1.0 U | <0.95 U | <0.92 U | <0.92 U |
| PFDoA | ng/L | 500 | <0.50 U | <0.49 U | <0.52 U | <0.51 U | <0.49 U | <0.52 U | <0.47 U | <0.46 U | <0.46 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.67 U | <0.66 U | <0.69 U | <0.68 U | <0.65 U | <0.68 U | <0.63 U | <0.61 U | <0.61 U |
| PFHxDA | ng/L | -- | <0.81 U | <0.80 U | <0.84 U | <0.82 U | <0.79 U | <0.83 U | <0.77 U | <0.75 U | <0.74 U |
| PFODA | ng/L | 400,000 | <0.86 U | <0.84 U | <0.89 U | <0.87 U | <0.84 U | <0.88 U | <0.81 U | <0.79 U | <0.79 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.5** | **3.1** | **4.7** | **1.7 J** | **2.9** | **9.2** | **1.9** | **2.1** | **4.7** |
| PFPeS | ng/L | -- | **2.9** | **2.7** | **4.3** | **0.69 J** | **1.3 J** | **8.2** | **1.7** | **1.6 J** | **1.2 J** |
| PFHxS | ng/L | 40 | **6.2** | **5.3** | **9.5** | **2.1** | **5.3** | **14** | **6.5** | **6.1** | **6.7** |
| PFHpS | ng/L | -- | **0.38 J** | **0.65 J** | **0.53 J** | <0.18 U | <0.17 U | **0.74 JI** | <0.16 U | <0.16 U | <0.16 U |
| PFOS | ng/L | 20 | **5.9 I** | **5.4 I** | **8.4 I** | **2.1** | **3.4** | **24 I** | **3.6** | **2.8** | **2.9** |
| PFNS | ng/L | -- | <0.34 U | <0.33 U | <0.35 U | <0.34 U | <0.33 U | <0.35 U | <0.32 U | <0.31 U | <0.31 U |
| PFDS | ng/L | -- | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.27 U | <0.27 U |
| PFDoS | ng/L | -- | <0.89 U | <0.87 U | <0.92 U | <0.90 U | <0.87 U | <0.91 U | <0.83 U | <0.81 U | <0.81 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.21 U | <0.23 U | <0.21 U | <0.20 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.2 U | <2.4 U | <2.3 U | <2.2 U | <2.3 U | <2.2 U | <2.1 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.42 U | <0.41 U | <0.44 U | <0.43 U | <0.41 U | <0.43 U | <0.40 U | <0.39 U | <0.39 U |
| 10:2 FTSA | ng/L | -- | <0.61 U | <0.60 U | <0.63 U | <0.62 U | <0.60 U | <0.63 U | <0.58 U | <0.56 U | <0.56 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.9** | **1.1 J** | **2.5** | **0.93 J** | **3.4** | **1.6 J** | <0.84 U | **1.1 J** | **2.0** |
| NMeFOSA | ng/L | -- | <0.39 U | <0.39 U | <0.41 U | <0.40 U | <0.38 U | <0.40 U | <0.37 U | <0.36 U | <0.36 U |
| NEtFOSA | ng/L | 20 | <0.79 U | <0.78 U | <0.82 U | <0.81 U | <0.78 U | <0.82 U | <0.75 U | <0.73 U | <0.73 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.78 U | <0.76 U | <0.81 U | <0.79 U | <0.76 U | <0.80 U | <0.73 U | <0.71 U | <0.71 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.36 U | <0.38 U | <0.37 U | <0.36 U | <0.38 U | <0.34 U | <0.34 U | <0.33 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.21 U | <0.23 U | <0.21 U | <0.20 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.27 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **17.9** | **27.4** | **15** | **2.1** | **7.9** | **30.2** | **5.6** | **5.1** | **9.2** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **19.8** | **28.5** | **17.5** | **3.03** | **11.3** | **31.8** | **5.6** | **6.2** | **11.2** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 1.2 | 1.6 | 1.1 | 0.2 | 0.7 | 2.0 | 0.4 | 0.5 | 0.7 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/27/21 | 04/24/21 | 04/24/21 | 04/24/21 | 04/30/21 | 04/27/21 | 04/24/21 | 04/30/21 | 04/24/21 |
| | | | Sample Number | PWS1066-OS-042721-100 | PWS1067-OS-042421-100 | PWS1068-OS-042421-100 | PWS1069-OS-042421-100 | PWS1070-OS-043021-100 | PWS1071-IS-042721-100 | PWS1072-OS-042421-100 | PWS1073-OS-043021-100 | PWS1074-IS-042421-100 |
| | | | Address | 2512 Lakeshore Drive | 222 Olivet Street | 213 Olivet Street | 215 Olivet Street | 316 Olivet Street | 308 Olivet Street | 304 Olivet Street | 407 Olivet Street | 402 Olivet Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **89** | <2.1 U | <2.2 U | <2.1 U | **2.8 J** | **5.7** | <2.1 U | **3.9 J** | **6.9** |
| PFPeA | ng/L | -- | **3.0** | **1.3 J** | <0.44 U | <0.43 U | <0.45 U | **0.53 J** | <0.43 U | <0.45 U | <0.45 U |
| PFHxA | ng/L | 150,000 | **1.9** | **1.7** | **0.59 J** | <0.51 U | <0.53 U | **0.83 J** | <0.50 U | <0.54 U | <0.53 U |
| PFHpA | ng/L | -- | **0.56 J** | **0.72 J** | <0.23 U | <0.22 U | <0.23 U | **0.75 J** | <0.22 U | <0.23 U | <0.23 U |
| PFOA | ng/L | 20 | **27** | **0.93 J** | <0.77 U | <0.75 U | **0.80 J** | **1.7** | <0.74 U | **1.3 J** | <0.78 U |
| PFNA | ng/L | 30 | <0.24 U | <0.23 U | <0.25 U | <0.24 U | <0.25 U | <0.22 U | <0.23 U | <0.25 U | <0.25 U |
| PFDA | ng/L | 300 | **0.29 J** | <0.27 U | <0.28 U | <0.27 U | <0.28 U | <0.25 U | <0.27 U | <0.29 U | <0.28 U |
| PFUnA | ng/L | 3,000 | <0.97 U | <0.94 U | <1.0 U | <0.97 U | <1.0 U | <0.90 U | <0.96 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.48 U | <0.47 U | <0.50 U | <0.49 U | <0.50 U | <0.45 U | <0.48 U | <0.51 U | <0.51 U |
| PFTriA | ng/L | -- | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.64 U | <0.62 U | <0.66 U | <0.65 U | <0.66 U | <0.59 U | <0.63 U | <0.68 U | <0.67 U |
| PFHxDA | ng/L | -- | <0.78 U | <0.76 U | <0.81 U | <0.79 U | <0.81 U | <0.72 U | <0.77 U | <0.82 U | <0.82 U |
| PFODA | ng/L | 400,000 | <0.83 U | <0.80 U | <0.85 U | <0.83 U | <0.85 U | <0.77 U | <0.82 U | <0.87 U | <0.86 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.3** | **1.1 J** | **1.5 J** | **0.26 J** | **1.8** | **5.4** | **3.9** | **3.1** | **4.7** |
| PFPeS | ng/L | -- | **1.9** | **0.34 J** | **1.0 J** | <0.27 U | **1.1 J** | **4.7** | **3.3** | **2.0** | **4.1** |
| PFHxS | ng/L | 40 | **4.8** | **1.1 J** | **2.2** | **1.8** | **1.8** | **7.0** | **5.4** | **4.0** | **6.0** |
| PFHpS | ng/L | -- | **0.33 JI** | <0.16 U | <0.17 U | <0.17 U | <0.17 U | **0.27 J** | <0.17 U | <0.18 U | <0.17 U |
| PFOS | ng/L | 20 | **15** | <0.46 U | **1.2 J** | <0.48 U | **1.9** | **3.6** | **2.7** | **4.4** | **2.3** |
| PFNS | ng/L | -- | <0.33 U | <0.32 U | <0.34 U | <0.33 U | <0.34 U | <0.30 U | <0.32 U | <0.34 U | <0.34 U |
| PFDS | ng/L | -- | <0.28 U | <0.27 U | <0.29 U | <0.28 U | <0.29 U | <0.26 U | <0.28 U | <0.30 U | <0.29 U |
| PFDoS | ng/L | -- | <0.85 U | <0.83 U | <0.88 U | <0.86 U | <0.88 U | <0.79 U | <0.84 U | <0.90 U | <0.89 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.20 U | <0.21 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.1 U | <2.3 U | <2.2 U | <2.3 U | <2.0 U | <2.2 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.40 U | <0.39 U | <0.42 U | <0.41 U | <0.42 U | <0.37 U | <0.40 U | <0.43 U | <0.42 U |
| 10:2 FTSA | ng/L | -- | <0.59 U | <0.57 U | <0.61 U | <0.59 U | <0.61 U | <0.55 U | <0.58 U | <0.62 U | <0.62 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **2.1** | **1.2 J** | **0.97 J** | **1.5 J** | **1.5 J** | **2.7** | **0.96 J** | <0.91 U | <0.90 U |
| NMeFOSA | ng/L | -- | <0.38 U | <0.37 U | <0.39 U | <0.38 U | <0.39 U | <0.35 U | <0.37 U | <0.40 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.77 U | <0.74 U | <0.79 U | <0.77 U | <0.79 U | <0.71 U | <0.76 U | <0.81 U | <0.80 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <0.98 U | <1.0 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.1 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.75 U | <0.73 U | <0.77 U | <0.75 U | <0.77 U | <0.69 U | <0.74 U | <0.79 U | <0.78 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.2 U | <1.3 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.35 U | <0.34 U | <0.36 U | <0.35 U | <0.36 U | <0.33 U | <0.35 U | <0.37 U | <0.37 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.20 U | <0.21 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.28 U | <0.27 U | <0.29 U | <0.28 U | <0.29 U | <0.26 U | <0.28 U | <0.30 U | <0.29 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **42** | **0.93** | **1.2** | ND | **2.7** | **5.3** | **2.7** | **5.7** | **2.3** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **44.1** | **2.13** | **2.17** | **1.5** | **4.2** | **8** | **3.66** | **5.7** | **2.3** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 2.3 | 0.1 | 0.2 | 0.1 | 0.3 | 0.6 | 0.3 | 0.4 | 0.3 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1075 | 1076 | 1077 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/24/21 | 04/29/21 | 04/25/21 | 04/25/21 | 04/25/21 | 04/24/21 | 04/27/21 | 04/25/21 | 04/28/21 |
| | | | Sample Number | PWS1075-OS-042421-100 | PWS1076-OS-042921-100 | PWS1077-OS-042521-100 | PWS-FD01-042521 | PWS1078-OS-042521-100 | PWS1079-OS-042421-100 | PWS1080-IS-042721-100 | PWS1081-OS-042521-100 | PWS1082-OS-042821-100 |
| | | | Address | 206 Church Drive | 208 Church Drive | 222 Church Drive | 222 Church Drive | 203 Church Drive | 213 Church Drive | 321 Church Drive | 416 Church Drive | 1926 Sharon Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.2 U | <2.2 U | <2.2 U | <2.1 U | <2.2 U | <2.1 U | **3.6 J** | **2.6 J** | **5.0** |
| PFPeA | ng/L | -- | <0.44 U | <0.45 U | <0.44 U | <0.43 U | <0.46 U | <0.43 U | <0.45 U | <0.46 U | <0.46 U |
| PFHxA | ng/L | 150,000 | **0.71 J** | <0.53 U | <0.52 U | <0.50 U | **0.56 J** | <0.50 U | **0.54 J** | <0.54 U | <0.55 U |
| PFHpA | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.23 U | <0.23 U | <0.24 U |
| PFOA | ng/L | 20 | <0.77 U | <0.78 U | <0.77 U | <0.74 U | **1.3 J** | <0.74 U | <0.78 U | <0.80 U | <0.80 U |
| PFNA | ng/L | 30 | <0.24 U | <0.25 U | <0.24 U | <0.23 U | <0.25 U | <0.23 U | <0.25 U | <0.25 U | <0.26 U |
| PFDA | ng/L | 300 | <0.28 U | <0.28 U | <0.28 U | <0.27 U | <0.29 U | <0.27 U | <0.28 U | <0.29 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <0.99 U | <1.0 U | <0.99 U | <0.95 U | <1.0 U | <0.96 U | <1.0 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.50 U | <0.50 U | <0.50 U | <0.48 U | <0.51 U | <0.48 U | <0.50 U | <0.52 U | <0.52 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.66 U | <0.67 U | <0.66 U | <0.63 U | <0.68 U | <0.63 U | <0.67 U | <0.68 U | <0.69 U |
| PFHxDA | ng/L | -- | <0.80 U | <0.82 U | <0.80 U | <0.77 U | <0.83 U | <0.77 U | <0.81 U | <0.83 U | <0.84 U |
| PFODA | ng/L | 400,000 | <0.85 U | <0.86 U | <0.85 U | <0.82 U | <0.87 U | <0.82 U | <0.86 U | <0.88 U | <0.89 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.56 J** | **1.1 J** | **1.3 J** | **1.3 J** | **2.4** | **0.93 J** | **2.9** | **4.2** | **1.0 J** |
| PFPeS | ng/L | -- | <0.27 U | **0.49 J** | **0.71 J** | **0.61 J** | <0.28 U | <0.26 U | **0.83 J** | **0.37 J** | <0.28 U |
| PFHxS | ng/L | 40 | **0.85 J** | **1.0 J** | **1.7 J** | **1.7** | **0.84 J** | **1.5 J** | **1.9** | **1.3 J** | **1.0 J** |
| PFHpS | ng/L | -- | <0.17 U | <0.17 U | <0.17 U | <0.16 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.18 U |
| PFOS | ng/L | 20 | <0.49 U | **0.51 J** | <0.49 U | **0.79 J** | <0.50 U | <0.47 U | **1.7 JB** | <0.51 U | <0.51 U |
| PFNS | ng/L | -- | <0.33 U | <0.34 U | <0.33 U | <0.32 U | <0.34 U | <0.32 U | <0.34 U | <0.35 U | <0.35 U |
| PFDS | ng/L | -- | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U | <0.30 U |
| PFDoS | ng/L | -- | <0.87 U | <0.89 U | <0.87 U | <0.84 U | <0.90 U | <0.84 U | <0.89 U | <0.91 U | <0.92 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.23 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.3 U | <2.3 U | <2.2 U | <2.3 U | <2.2 U | <2.3 U | <2.3 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | <0.41 U | <0.42 U | <0.41 U | <0.40 U | <0.43 U | <0.40 U | <0.42 U | <0.43 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | <0.60 U | <0.61 U | <0.60 U | <0.58 U | <0.62 U | <0.58 U | <0.61 U | <0.63 U | <0.63 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.3 J** | **1.1 J** | **1.2 J** | **1.2 J** | **1.8 J** | **1.3 J** | **1.4 J** | **1.6 J** | <0.93 U |
| NMeFOSA | ng/L | -- | <0.39 U | <0.39 U | <0.39 U | <0.37 U | <0.40 U | <0.37 U | <0.39 U | <0.40 U | <0.41 U |
| NEtFOSA | ng/L | 20 | <0.78 U | <0.80 U | <0.78 U | <0.76 U | <0.81 U | <0.76 U | <0.79 U | <0.82 U | <0.82 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.77 U | <0.78 U | <0.77 U | <0.74 U | <0.79 U | <0.74 U | <0.78 U | <0.80 U | <0.80 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.37 U | <0.36 U | <0.35 U | <0.37 U | <0.35 U | <0.37 U | <0.38 U | <0.38 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.23 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **0.51** | ND | **0.79** | **1.3** | ND | **1.7** | ND | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.3** | **1.61** | **1.2** | **1.99** | **3.1** | **1.3** | **3.1** | **1.6** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/25/21 | 04/28/21 | 04/28/21 | 04/27/21 | 05/05/21 | 04/30/21 | 04/29/21 | 04/27/21 | 04/27/21 |
| | | | Sample Number | PWS1083-OS-042521-100 | PWS1084-OS-042821-100 | PWS1085-OS-042821-100 | PWS1086-OS-042721-100 | PWS1087-OS-050421-100 | PWS1088-OS-043021-100 | PWS1089-OS-042921-100 | PWS1090-OS-042721-100 | PWS1091-OS-042721-100 |
| | | | Address | 525 Copus Court | 1917 Lombard Court | 1910 Lakeshore Drive | 545 Hinkley Road | 536 Hinkley Road | 424 Hinkley Road | 341 Tellin Court | 239 Tellin Court | 418 Hinkley Road |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.1 U | **4.0 J** | **3.4 J** | **5.7** | **4.7** | **4.3 J** | <2.2 U | **5.8** | **4.8** |
| PFPeA | ng/L | -- | <0.43 U | **6.4** | <0.46 U | **5.5** | **0.56 J** | **4.0** | **0.91 J** | **1.2 J** | **1.5 J** |
| PFHxA | ng/L | 150,000 | <0.50 U | **9.9** | **0.71 J** | **4.6** | **0.62 J** | **5.9** | <0.54 U | **2.0** | **2.2** |
| PFHpA | ng/L | -- | <0.22 U | **5.5** | **0.33 J** | **2.3** | **0.32 J** | <0.23 U | <0.23 U | **0.63 J** | **1.7** |
| PFOA | ng/L | 20 | <0.74 U | **15** | <0.80 U | **3.2** | **0.99 J** | <0.79 U | **1.1 J** | **2.0** | **2.8** |
| PFNA | ng/L | 30 | <0.23 U | <0.25 U | **0.35 J** | <0.23 U | <0.23 U | <0.25 U | <0.25 U | <0.25 U | <0.23 U |
| PFDA | ng/L | 300 | <0.27 U | <0.29 U | **0.59 J** | <0.27 U | <0.27 U | <0.29 U | <0.29 U | <0.29 U | **0.30 J** |
| PFUnA | ng/L | 3,000 | <0.96 U | <1.0 U | <1.0 U | <0.96 U | <0.96 U | <1.0 U | <1.0 U | <1.0 U | <0.95 U |
| PFDoA | ng/L | 500 | <0.48 U | <0.51 U | <0.52 U | <0.48 U | <0.48 U | <0.51 U | <0.51 U | <0.51 U | <0.48 U |
| PFTriA | ng/L | -- | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.63 U | <0.68 U | <0.68 U | <0.63 U | <0.64 U | <0.68 U | <0.68 U | <0.67 U | <0.63 U |
| PFHxDA | ng/L | -- | <0.77 U | <0.83 U | <0.83 U | <0.77 U | <0.77 U | <0.82 U | <0.82 U | <0.82 U | <0.77 U |
| PFODA | ng/L | 400,000 | <0.82 U | <0.88 U | <0.88 U | <0.82 U | <0.82 U | <0.87 U | <0.87 U | <0.87 U | <0.81 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.0 J** | **0.68 J** | **1.1 J** | **1.2 J** | **1.6 J** | **1.7 J** | **2.0** | **1.7 J** | **2.6** |
| PFPeS | ng/L | -- | **0.45 J** | <0.28 U | **0.63 J** | **0.36 J** | **0.29 J** | <0.28 U | **0.41 J** | **1.0 J** | **0.37 J** |
| PFHxS | ng/L | 40 | **1.8** | **4.1** | **1.8 J** | **4.1** | **1.8** | **1.3 J** | **2.1** | **7.0** | **2.2** |
| PFHpS | ng/L | -- | <0.17 U | <0.18 U | **0.29 J** | <0.17 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U | <0.16 U |
| PFOS | ng/L | 20 | **4.0** | **1.9 I** | **0.85 JI** | **2.9 I** | **2.5** | <0.50 U | **2.4 I** | **4.0 I** | **1.1 JI** |
| PFNS | ng/L | -- | <0.32 U | <0.34 U | <0.35 U | <0.32 U | <0.32 U | <0.34 U | <0.34 U | <0.34 U | <0.32 U |
| PFDS | ng/L | -- | <0.28 U | <0.30 U | **0.34 J** | <0.28 U | <0.28 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U |
| PFDoS | ng/L | -- | <0.84 U | <0.90 U | <0.91 U | <0.84 U | <0.84 U | <0.90 U | <0.90 U | <0.89 U | <0.84 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.22 U | **0.38 J** | <0.21 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.3 U | <2.3 U | <2.2 U | <2.2 U | <2.3 U | <2.3 U | <2.3 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.40 U | <0.43 U | <0.43 U | <0.40 U | <0.40 U | <0.43 U | <0.43 U | <0.42 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.58 U | <0.62 U | <0.63 U | <0.58 U | <0.58 U | <0.62 U | <0.62 U | <0.62 U | <0.58 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.85 U | <0.91 U | <0.92 U | **3.5** | <0.85 U | **1.1 J** | **2.5** | <0.90 U | **2.5** |
| NMeFOSA | ng/L | -- | <0.37 U | <0.40 U | **0.42 JI** | <0.37 U | <0.37 U | <0.40 U | <0.40 U | <0.40 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.76 U | <0.81 U | <0.82 U | <0.76 U | <0.76 U | <0.80 U | <0.81 U | <0.80 U | <0.75 U |
| NMeFOSAA | ng/L | -- | <1.0 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.74 U | <0.79 U | <0.80 U | <0.74 U | <0.74 U | <0.79 U | <0.79 U | <0.78 U | <0.73 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.35 U | <0.37 U | <0.38 U | <0.35 U | <0.35 U | <0.37 U | <0.37 U | <0.37 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.22 U | **0.37 J** | <0.21 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.28 U | <0.30 U | <0.30 U | <0.28 U | <0.28 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **4** | **16.9** | **0.85** | **6.1** | **3.49** | ND | **3.5** | **6** | **3.9** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **4** | **16.9** | **0.85** | **9.6** | **3.49** | **1.1** | **6** | **6** | **6.4** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.2 | 0.9 | 0.1 | 0.6 | 0.2 | 0.1 | 0.4 | 0.5 | 0.4 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

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ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

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I = Value is estimated maximum possible concentration

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Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/27/21 | 04/29/21 | 04/27/21 | 04/27/21 | 04/28/21 | 04/27/21 | 04/26/21 | 04/27/21 | 04/27/21 |
| | | | Sample Number | PWS-FD02-042721 | PWS1092-OS-042921-100 | PWS1093-OS-042721-100 | PWS1094-OS-042721-100 | PWS1095-IS-042821-100 | PWS1096-OS-042721-100 | PWS1097-OS-042621-100 | PWS1098-OS-042721-100 | PWS1099-OS-042721-100 |
| | | | Address | 418 Hinkley Road | 340 Tellin Court | 1848 Lakeshore Drive | 1839 Aiken Road | 540 Hinkley Road | 1819 Bainbridge Street | 1815 Bainbridge Street | 1818 Bainbridge Street | 1818 La Fond Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **4.9** | **3.1 J** | **9.6** | **3.9 J** | <2.2 U | <2.2 U | <2.2 U | <2.4 U | **10** |
| PFPeA | ng/L | -- | **1.3 J** | <0.45 U | **1.5 J** | **1.3 J** | <0.45 U | <0.45 U | <0.45 U | <0.49 U | **1.3 J** |
| PFHxA | ng/L | 150,000 | **2.2** | <0.53 U | **2.0** | <0.55 U | <0.53 U | <0.53 U | <0.53 U | <0.58 U | **1.7** |
| PFHpA | ng/L | -- | **1.7 J** | **1.1 J** | **0.95 J** | <0.24 U | <0.23 U | <0.23 U | <0.23 U | <0.25 U | **1.3 J** |
| PFOA | ng/L | 20 | **2.6** | **1.4 J** | **3.4** | **2.1** | <0.78 U | **0.84 J** | <0.78 U | <0.85 U | **4.0** |
| PFNA | ng/L | 30 | <0.24 U | <0.25 U | <0.25 U | <0.26 U | <0.25 U | <0.25 U | <0.25 U | <0.27 U | <0.23 U |
| PFDA | ng/L | 300 | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.28 U | <0.29 U | <0.31 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <0.98 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <0.96 U |
| PFDoA | ng/L | 500 | <0.49 U | <0.51 U | <0.51 U | <0.52 U | <0.50 U | <0.51 U | <0.51 U | <0.55 U | <0.48 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.65 U | <0.67 U | <0.67 U | <0.69 U | <0.67 U | <0.67 U | <0.67 U | <0.73 U | <0.63 U |
| PFHxDA | ng/L | -- | <0.80 U | <0.82 U | <0.82 U | <0.84 U | <0.82 U | <0.82 U | <0.82 U | <0.89 U | <0.77 U |
| PFODA | ng/L | 400,000 | <0.84 U | <0.86 U | <0.87 U | <0.89 U | <0.86 U | <0.86 U | <0.87 U | <0.94 U | <0.82 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.6** | **0.73 J** | **2.0** | **5.3** | **0.39 J** | **1.5 J** | **0.70 J** | <0.20 U | **3.1** |
| PFPeS | ng/L | -- | **0.44 J** | **0.33 J** | **0.75 J** | <0.28 U | <0.28 U | **0.28 J** | <0.28 U | <0.30 U | **0.59 J** |
| PFHxS | ng/L | 40 | **2.1** | **0.91 J** | **1.4 J** | **12** | **2.2** | **2.4** | **0.88 J** | <0.57 U | **2.9** |
| PFHpS | ng/L | -- | <0.17 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.19 U | <0.17 U |
| PFOS | ng/L | 20 | **1.1 JI** | <0.50 U | **2.4** | **3.2 I** | **0.76 J** | **3.6 I** | **1.2 JB** | <0.54 U | **4.1** |
| PFNS | ng/L | -- | <0.33 U | <0.34 U | <0.34 U | <0.35 U | <0.34 U | <0.34 U | <0.34 U | <0.37 U | <0.32 U |
| PFDS | ng/L | -- | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.32 U | <0.28 U |
| PFDoS | ng/L | -- | <0.87 U | <0.89 U | <0.90 U | <0.92 U | <0.89 U | <0.89 U | <0.89 U | <0.97 U | <0.84 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.22 U | <0.24 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.3 U | <2.3 U | <2.4 U | <2.3 U | <2.3 U | <2.3 U | <2.5 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.41 U | <0.42 U | <0.43 U | <0.44 U | <0.42 U | <0.42 U | <0.42 U | <0.46 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.60 U | <0.62 U | <0.62 U | <0.63 U | <0.61 U | <0.62 U | <0.62 U | <0.67 U | <0.58 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **3.7** | **1.8** | <0.91 U | <0.93 U | <0.90 U | <0.90 U | **2.1** | <0.98 U | **3.2** |
| NMeFOSA | ng/L | -- | <0.38 U | <0.40 U | <0.40 U | <0.41 U | <0.39 U | <0.40 U | <0.40 U | <0.43 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.78 U | <0.80 U | <0.80 U | <0.82 U | <0.80 U | <0.80 U | <0.80 U | <0.87 U | <0.76 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.76 U | <0.78 U | <0.79 U | <0.81 U | <0.78 U | <0.78 U | <0.78 U | <0.85 U | <0.74 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.5 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.37 U | <0.37 U | <0.38 U | <0.37 U | <0.37 U | <0.37 U | <0.40 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.22 U | <0.24 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.32 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **3.7** | **1.4** | **5.8** | **5.3** | **0.76** | **4.44** | **1.2** | ND | **8.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **7.4** | **3.2** | **5.8** | **5.3** | **0.76** | **4.44** | **3.3** | ND | **11.3** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.4 | 0.2 | 0.3 | 0.6 | 0.1 | 0.3 | 0.2 | 0.0 | 0.6 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1105 | 1106 | 1107 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 05/06/21 | 04/29/21 | 04/28/21 | 04/30/21 | 04/26/21 | 04/26/21 | 04/26/21 | 04/29/21 | 04/23/21 |
| | | | Sample Number | PWS1100-IS-050621-100 | PWS1101-OS-042921-100 | PWS1102-OS-042821-100 | PWS1103-OS-043021-100 | PWS1104-OS-042621-100 | PWS1105-OS-042621-100 | PWS-FD02-042621 | PWS1106-OS-042921-100 | PWS1107-OS-042321-100 |
| | | | Address | 1824 Caroline Street | 104 Hinkley Road | 216 Hinkley Road | 1831 Bainbridge Street | 122 Hinkley Road | 1707 Nakomis Avenue | 1707 Nakomis Avenue | 1823 Nakomis Avenue | 1921 Nakomis Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **4.3** | **3.1 J** | <2.3 U | **2.8 J** | **3.1 J** | <2.2 U | <2.2 U | <2.3 U | <2.1 U |
| PFPeA | ng/L | -- | **3.8** | <0.46 U | <0.46 U | **0.94 J** | <0.45 U | <0.45 U | <0.45 U | <0.46 U | <0.43 U |
| PFHxA | ng/L | 150,000 | **2.6** | <0.54 U | <0.54 U | **2.2** | <0.53 U | <0.53 U | <0.54 U | <0.54 U | <0.51 U |
| PFHpA | ng/L | -- | **0.77 J** | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.22 U |
| PFOA | ng/L | 20 | **2.1** | <0.80 U | <0.80 U | <0.80 U | <0.78 U | <0.78 U | <0.79 U | <0.80 U | <0.75 U |
| PFNA | ng/L | 30 | <0.23 U | <0.25 U | <0.25 U | <0.25 U | <0.25 U | <0.25 U | <0.25 U | <0.25 U | <0.24 U |
| PFDA | ng/L | 300 | <0.26 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <0.92 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <0.97 U |
| PFDoA | ng/L | 500 | <0.46 U | <0.51 U | <0.52 U | <0.51 U | <0.51 U | <0.50 U | <0.51 U | <0.52 U | <0.49 U |
| PFTriA | ng/L | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.61 U | <0.68 U | <0.69 U | <0.68 U | <0.67 U | <0.67 U | <0.68 U | <0.68 U | <0.65 U |
| PFHxDA | ng/L | -- | <0.75 U | <0.83 U | <0.84 U | <0.83 U | <0.82 U | <0.82 U | <0.82 U | <0.83 U | <0.79 U |
| PFODA | ng/L | 400,000 | <0.79 U | <0.88 U | <0.88 U | <0.88 U | <0.87 U | <0.86 U | <0.87 U | <0.88 U | <0.83 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.4** | **0.24 J** | <0.19 U | **4.5** | **1.3 J** | <0.18 U | <0.19 U | **0.35 J** | <0.18 U |
| PFPeS | ng/L | -- | <0.25 U | <0.28 U | <0.28 U | **2.2** | <0.28 U | <0.27 U | <0.28 U | **0.51 J** | <0.27 U |
| PFHxS | ng/L | 40 | **1.3 J** | **0.56 J** | <0.53 U | **8.8** | **0.90 J** | <0.52 U | <0.53 U | **0.55 J** | <0.50 U |
| PFHpS | ng/L | -- | <0.16 U | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U |
| PFOS | ng/L | 20 | **3.7 I** | <0.51 U | <0.51 U | <0.51 U | <0.50 U | <0.49 U | <0.50 U | <0.51 U | <0.48 U |
| PFNS | ng/L | -- | <0.31 U | <0.35 U | <0.35 U | <0.35 U | <0.34 U | <0.34 U | <0.34 U | <0.35 U | <0.33 U |
| PFDS | ng/L | -- | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.28 U |
| PFDoS | ng/L | -- | <0.82 U | <0.91 U | <0.91 U | <0.91 U | <0.89 U | <0.89 U | <0.90 U | <0.91 U | <0.86 U |
| 4:2 FTSA | ng/L | -- | <0.20 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.23 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.1 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.39 U | <0.43 U | <0.43 U | <0.43 U | <0.42 U | <0.42 U | <0.43 U | <0.43 U | <0.41 U |
| 10:2 FTSA | ng/L | -- | <0.56 U | <0.63 U | <0.63 U | <0.63 U | <0.62 U | <0.61 U | <0.62 U | <0.63 U | <0.59 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **0.84 J** | <0.92 U | <0.92 U | **1.4 J** | **1.8** | **1.5 J** | **1.2 J** | <0.92 U | <0.87 U |
| NMeFOSA | ng/L | -- | <0.36 U | <0.40 U | <0.40 U | <0.40 U | <0.40 U | <0.39 U | <0.40 U | <0.40 U | <0.38 U |
| NEtFOSA | ng/L | 20 | <0.73 U | <0.81 U | <0.82 U | <0.81 U | <0.80 U | <0.80 U | <0.81 U | <0.82 U | <0.77 U |
| NMeFOSAA | ng/L | -- | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.71 U | <0.80 U | <0.80 U | <0.80 U | <0.78 U | <0.78 U | <0.79 U | <0.80 U | <0.75 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.34 U | <0.37 U | <0.38 U | <0.37 U | <0.37 U | <0.37 U | <0.37 U | <0.38 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.20 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.23 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **5.8** | ND | ND | ND | ND | ND | ND | ND | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **6.64** | ND | ND | **1.4** | **1.8** | **1.5** | **1.2** | ND | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.4 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/24/21 | 04/24/21 | 04/30/21 | 04/28/21 | 05/07/21 | 05/07/21 | 04/29/21 | 04/28/21 | 04/24/21 |
| | | | Sample Number | PWS1108-OS-042421-100 | PWS1109-OS-042421-100 | PWS1110-IS-043021-100 | PWS1111-OS-042821-100 | PWS1112-OS-050721-100 | PWS1113-OS-050721-100 | PWS1114-OS-042921-100 | PWS1115-OS-042821-100 | PWS1116-OS-042421-100 |
| | | | Address | 1905 Nakomis Avenue | 1929 Cherokee Avenue | 1926 Cherokee Avenue | 1925 Nakomis Avenue | 1911 Nakomis Avenue | 1910 Nakomis Avenue | 1922 Cherokee Avenue | 1802 Bainbridge Street | 1747 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.2 U | **5.1** | **3.0 J** | <2.2 U | <2.0 U | <2.0 U | <2.2 U | **8.2** | **5.0** |
| PFPeA | ng/L | -- | <0.44 U | **4.4** | **1.7 J** | <0.45 U | <0.42 U | <0.41 U | <0.45 U | **1.6 J** | **0.58 J** |
| PFHxA | ng/L | 150,000 | <0.52 U | **3.1** | **1.7 J** | <0.53 U | <0.49 U | <0.48 U | <0.53 U | **2.0** | **0.75 J** |
| PFHpA | ng/L | -- | <0.22 U | **1.4 J** | **0.56 J** | <0.23 U | <0.21 U | <0.21 U | <0.23 U | **1.1 J** | **0.40 J** |
| PFOA | ng/L | 20 | <0.76 U | **1.2 J** | **1.0 J** | <0.78 U | <0.72 U | <0.70 U | **0.92 J** | **3.3** | **1.4 J** |
| PFNA | ng/L | 30 | <0.24 U | <0.24 U | <0.26 U | <0.25 U | <0.23 U | <0.22 U | <0.25 U | <0.26 U | <0.23 U |
| PFDA | ng/L | 300 | <0.28 U | <0.27 U | <0.29 U | <0.28 U | <0.26 U | <0.26 U | <0.29 U | <0.29 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <0.99 U | <0.97 U | <1.0 U | <1.0 U | <0.93 U | <0.91 U | <1.0 U | <1.0 U | <0.94 U |
| PFDoA | ng/L | 500 | <0.49 U | <0.48 U | <0.52 U | <0.51 U | <0.47 U | <0.46 U | <0.51 U | <0.52 U | <0.47 U |
| PFTriA | ng/L | -- | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.66 U | <0.64 U | <0.69 U | <0.67 U | <0.62 U | <0.60 U | <0.67 U | <0.69 U | <0.62 U |
| PFHxDA | ng/L | -- | <0.80 U | <0.78 U | <0.84 U | <0.82 U | <0.75 U | <0.74 U | <0.82 U | <0.84 U | <0.76 U |
| PFODA | ng/L | 400,000 | <0.85 U | <0.83 U | <0.89 U | <0.86 U | <0.80 U | <0.78 U | <0.87 U | <0.89 U | <0.80 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | <0.18 U | **0.35 J** | **0.19 J** | <0.18 U | **0.42 J** | **0.35 J** | <0.18 U | **2.4** | **16** |
| PFPeS | ng/L | -- | <0.27 U | <0.26 U | <0.28 U | <0.28 U | <0.25 U | <0.25 U | <0.28 U | **0.28 J** | **0.26 JI** |
| PFHxS | ng/L | 40 | <0.51 U | **0.83 J** | **0.60 J** | <0.52 U | <0.48 U | <0.47 U | <0.52 U | **0.96 J** | **0.89 J** |
| PFHpS | ng/L | -- | <0.17 U | <0.17 U | <0.18 U | <0.17 U | <0.16 U | <0.16 U | <0.17 U | <0.18 U | <0.16 U |
| PFOS | ng/L | 20 | <0.49 U | **0.62 J** | <0.51 U | <0.50 U | <0.46 U | <0.45 U | <0.50 U | **8.2** | **2.7 I** |
| PFNS | ng/L | -- | <0.33 U | <0.32 U | <0.35 U | <0.34 U | <0.31 U | <0.31 U | <0.34 U | <0.35 U | <0.31 U |
| PFDS | ng/L | -- | <0.29 U | <0.28 U | <0.30 U | <0.29 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.27 U |
| PFDoS | ng/L | -- | <0.87 U | <0.85 U | <0.92 U | <0.89 U | <0.82 U | <0.80 U | <0.89 U | <0.92 U | <0.82 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.21 U | <0.23 U | <0.22 U | <0.20 U | <0.20 U | <0.22 U | <0.23 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.2 U | <2.4 U | <2.3 U | <2.1 U | <2.1 U | <2.3 U | <2.4 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.41 U | <0.40 U | <0.44 U | <0.42 U | <0.39 U | <0.38 U | <0.42 U | <0.44 U | <0.39 U |
| 10:2 FTSA | ng/L | -- | <0.60 U | <0.59 U | <0.63 U | <0.62 U | <0.57 U | <0.55 U | <0.62 U | <0.63 U | <0.57 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.0 J** | **0.97 J** | <0.93 U | <0.90 U | <0.83 U | <0.81 U | **1.2 J** | <0.93 U | **1.6 J** |
| NMeFOSA | ng/L | -- | <0.39 U | <0.38 U | <0.41 U | <0.40 U | <0.36 U | <0.36 U | <0.40 U | <0.41 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.78 U | <0.76 U | <0.82 U | <0.80 U | <0.74 U | <0.72 U | <0.80 U | <0.82 U | <0.74 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <0.99 U | <1.1 U | <1.1 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.2 UF1 | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.76 U | <0.75 U | <0.81 U | <0.78 U | <0.72 U | <0.70 U | <0.78 U | <0.81 U | <0.72 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.2 U | <1.4 U | <1.4 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.35 U | <0.38 U | <0.37 U | <0.34 U | <0.33 U | <0.37 U | <0.38 U | <0.34 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.21 U | <0.23 U | <0.22 U | <0.20 U | <0.20 U | <0.22 U | <0.23 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.28 U | <0.30 U | <0.29 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **1.82** | **1** | ND | ND | ND | **0.92** | **11.5** | **4.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1** | **2.79** | **1** | ND | ND | ND | **2.12** | **11.5** | **5.7** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 0.3 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1117 | 1118 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/23/21 | 04/28/21 | 04/28/21 | 04/22/21 | 04/22/21 | 04/27/21 | 04/22/21 | 04/23/21 | 04/21/21 |
| | | Sample Number | PWS1117-OS-042321-100 | PWS1118-OS-042821-100 | PWS-FD02-042821 | PWS1119-OS-042221-100 | PWS1120-OS-042221-100 | PWS1121-OS-042721-100 | PWS1122-OS-042221-100 | PWS1123-OS-042321-100 | PWS1124-OS-042121-100 |
| | | Address | 1808 Caroline Street | 1809 Caroline Street | 1809 Caroline Street | 1803 Bainbridge Street | 137 Tellin Court | 1738 Caroline Street | 1742 Caroline Street | 1736 Bainbridge Street | 1734 La Fond Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.4** | **5.7** | **5.9** | **2.8 J** | **5.3** | **8.0** | **7.7** | **9.5** | <2.2 U |
| PFPeA | ng/L | -- | **1.3 J** | **0.89 J** | **0.95 J** | <0.46 U | <0.41 U | **1.4 J** | **0.79 J** | **0.69 J** | <0.45 U |
| PFHxA | ng/L | 150,000 | **1.8** | **1.2 J** | **1.4 J** | <0.55 U | <0.49 U | **1.9** | **2.1** | **1.0 J** | **0.60 J** |
| PFHpA | ng/L | -- | **1.3 J** | **0.68 J** | **0.67 J** | <0.24 U | **0.21 J** | **2.2** | **0.47 J** | **0.69 J** | <0.23 U |
| PFOA | ng/L | 20 | **4.8** | **2.2** | **2.2** | <0.80 U | **0.73 J** | **7.8** | **3.0** | **2.0** | **0.98 J** |
| PFNA | ng/L | 30 | <0.24 U | <0.26 U | <0.25 U | <0.25 U | <0.23 U | <0.24 U | <0.23 U | <0.25 U | <0.25 U |
| PFDA | ng/L | 300 | <0.27 U | **0.37 J** | <0.29 U | <0.29 U | <0.26 U | <0.27 U | <0.27 U | **0.30 J** | <0.28 U |
| PFUnA | ng/L | 3,000 | <0.97 U | <1.1 U | <1.0 U | <1.0 U | <0.93 U | <0.96 U | <0.95 U | <1.0 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.48 U | <0.53 U | <0.52 U | <0.52 U | <0.46 U | <0.48 U | <0.47 U | <0.51 U | <0.50 U |
| PFTriA | ng/L | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.64 U | <0.70 U | <0.68 U | <0.69 U | <0.62 U | <0.64 U | <0.63 U | <0.68 U | <0.66 U |
| PFHxDA | ng/L | -- | <0.78 U | <0.85 U | <0.83 U | <0.84 U | <0.75 U | <0.78 U | <0.77 U | <0.83 U | <0.81 U |
| PFODA | ng/L | 400,000 | <0.83 U | <0.90 U | <0.88 U | <0.88 U | <0.79 U | <0.82 U | <0.81 U | <0.88 U | <0.86 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.4 J** | **2.2** | **2.0** | **0.54 J** | **1.6 J** | **4.3** | **5.1** | **1.3 J** | **0.72 J** |
| PFPeS | ng/L | -- | <0.26 U | <0.29 U | <0.28 U | <0.28 U | <0.25 U | **0.51 J** | **0.27 J** | **0.34 J** | <0.27 U |
| PFHxS | ng/L | 40 | **0.55 J** | **0.77 J** | **0.67 J** | **0.81 J** | **0.77 J** | **6.4** | **2.1** | **1.9** | **0.79 J** |
| PFHpS | ng/L | -- | <0.17 U | <0.18 U | <0.18 U | <0.18 U | <0.16 U | **0.36 J** | **0.17 J** | <0.18 U | <0.17 U |
| PFOS | ng/L | 20 | **3.2** | **3.9** | **3.8** | <0.51 U | **1.9 I** | **10 I** | **11** | **3.7 I** | **1.4 JI** |
| PFNS | ng/L | -- | <0.33 U | <0.35 U | <0.35 U | <0.35 U | <0.31 U | <0.32 U | <0.32 U | <0.35 U | <0.34 U |
| PFDS | ng/L | -- | <0.28 U | <0.31 U | <0.30 U | <0.30 U | <0.27 U | <0.28 U | <0.28 U | <0.30 U | <0.29 U |
| PFDoS | ng/L | -- | <0.85 U | <0.93 U | <0.91 U | <0.91 U | <0.82 U | <0.85 U | <0.84 U | <0.91 U | <0.88 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.20 U | <0.21 U | <0.21 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.4 U | <2.3 U | <2.4 U | <2.1 U | <2.2 U | <2.2 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.40 U | <0.44 U | <0.43 U | <0.43 U | <0.39 U | <0.40 U | <0.40 U | <0.43 U | <0.42 U |
| 10:2 FTSA | ng/L | -- | <0.59 U | <0.64 U | <0.63 U | <0.63 U | <0.57 U | <0.59 U | <0.58 U | <0.63 U | <0.61 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.6 J** | <0.94 U | <0.92 U | **1.4 J** | **1.5 J** | **3.9** | <0.84 U | **1.8 J** | **4.5** |
| NMeFOSA | ng/L | -- | <0.38 U | <0.41 U | <0.40 U | <0.40 U | <0.36 U | <0.38 U | <0.37 U | <0.40 U | <0.39 U |
| NEtFOSA | ng/L | 20 | <0.77 U | <0.83 U | <0.82 U | <0.82 U | <0.73 U | <0.76 U | <0.75 U | <0.81 U | <0.79 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.75 U | <0.81 U | <0.80 U | <0.80 U | <0.72 U | <0.74 U | <0.73 U | <0.79 U | <0.77 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.35 U | <0.38 U | <0.37 U | <0.38 U | <0.34 U | <0.35 U | <0.34 U | <0.37 U | <0.36 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.20 U | <0.21 U | <0.21 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.28 U | <0.31 U | <0.30 U | <0.30 U | <0.27 U | <0.28 U | <0.28 U | <0.30 U | <0.29 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **8** | **6.1** | **6** | ND | **2.63** | **17.8** | **14** | **5.7** | **2.38** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **9.6** | **6.1** | **6** | **1.4** | **4.13** | **21.7** | **14** | **7.5** | **6.88** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 0.5 | 0.3 | 0.3 | 0.1 | 0.2 | 1.2 | 0.8 | 0.4 | 0.4 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1125 | 1126 | 1127 | 1128 | 1129 | 1129 | 1130 | 1131 | 1132 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/29/21 | 04/23/21 | 04/29/21 | 05/05/21 | 04/28/21 | 04/28/21 | 05/06/21 | 04/23/21 | 04/26/21 |
| | | Sample Number | PWS1125-OS-042921-100 | PWS1126-OS-042321-100 | PWS1127-OS-042921-100 | PWS1128-OS-050421-100 | PWS1129-OS-042821-100 | PWS-FD01-042821 | PWS1130-OS-050621-100 | PWS1131-OS-042321-100 | PWS1132-OS-042621-100 |
| | | Address | 1749 La Crescent Street | 1703 Bainbridge Street | 1725 La Fond Avenue | 1727 Caroline Street | 1724 Caroline Street | 1724 Caroline Street | 1720 Caroline Street | 1716 La Fond Avenue | 1718 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.3 U | **9.1** | **2.6 J** | **2.3 J** | **2.3 J** | **2.3 J** | **5.0** | **2.9 J** | **7.3** |
| PFPeA | ng/L | -- | <0.46 U | **2.9** | <0.46 U | **0.73 J** | **1.5 J** | **1.3 J** | **2.3** | <0.44 U | **4.5** |
| PFHxA | ng/L | 150,000 | **0.74 J** | **2.7** | <0.55 U | **0.93 J** | **1.6 J** | **1.8 J** | **2.6** | **0.70 J** | **6.6** |
| PFHpA | ng/L | -- | <0.24 U | **1.7 J** | <0.24 U | **0.65 J** | **1.1 J** | **0.59 J** | **1.1 J** | <0.22 U | **4.3** |
| PFOA | ng/L | 20 | <0.80 U | **5.5** | **0.99 J** | **2.8** | **2.7** | **2.1** | **2.8** | **1.2 J** | **12** |
| PFNA | ng/L | 30 | <0.25 U | <0.25 U | <0.26 U | <0.25 U | <0.25 U | <0.26 U | <0.23 U | <0.24 U | <0.26 U |
| PFDA | ng/L | 300 | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.28 U | <0.29 U | <0.26 U | <0.28 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <0.93 U | <0.99 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.52 U | <0.52 U | <0.52 U | <0.50 U | <0.50 U | <0.52 U | <0.47 U | <0.49 U | <0.52 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.69 U | <0.69 U | <0.69 U | <0.66 U | <0.67 U | <0.69 U | <0.62 U | <0.65 U | <0.69 U |
| PFHxDA | ng/L | -- | <0.84 U | <0.84 U | <0.84 U | <0.81 U | <0.81 U | <0.85 U | <0.75 U | <0.80 U | <0.84 U |
| PFODA | ng/L | 400,000 | <0.88 U | <0.88 U | <0.89 U | <0.85 U | <0.86 U | <0.89 U | <0.80 U | <0.84 U | <0.89 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.7 J** | **6.6** | **0.84 JI** | **19** | **1.2 J** | **1.2 J** | **3.9** | **0.55 J** | **5.1** |
| PFPeS | ng/L | -- | **0.49 J** | **0.54 J** | <0.28 U | <0.27 U | <0.27 U | <0.28 U | **0.44 J** | <0.27 U | **1.1 J** |
| PFHxS | ng/L | 40 | **10** | **2.3** | **0.80 JI** | **2.0** | **0.84 J** | **0.77 J** | **2.6** | **0.86 J** | **4.5** |
| PFHpS | ng/L | -- | **0.24 J** | <0.18 U | <0.18 U | **0.19 J** | <0.17 U | <0.18 U | <0.16 U | <0.17 U | **0.47 J** |
| PFOS | ng/L | 20 | **4.1** | **13** | **3.3 I** | **3.6** | **3.4** | **3.0** | **3.8** | **1.6 JI** | **15 B** |
| PFNS | ng/L | -- | <0.35 U | <0.35 U | <0.35 U | <0.34 U | <0.34 U | <0.35 U | <0.31 U | <0.33 U | <0.35 U |
| PFDS | ng/L | -- | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.91 U | <0.91 U | <0.92 U | <0.88 U | <0.89 U | <0.92 U | <0.82 U | <0.87 U | <0.92 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.22 U | <0.22 U | <0.23 U | <0.20 U | <0.22 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.3 U | <2.4 U | <2.3 U | <2.3 U | <2.4 U | <2.1 U | <2.2 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.43 U | <0.43 U | <0.42 U | <0.42 U | <0.44 U | <0.39 U | <0.41 U | <0.44 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.63 U | <0.63 U | <0.61 U | <0.61 U | <0.64 U | <0.57 U | <0.60 U | <0.64 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.0 J** | **1.9** | **3.9** | **3.7** | <0.89 U | <0.93 U | **1.1 J** | **2.2** | **1.2 J** |
| NMeFOSA | ng/L | -- | <0.40 U | <0.40 U | <0.41 U | <0.39 U | <0.39 U | <0.41 U | <0.36 U | <0.39 U | <0.41 U |
| NEtFOSA | ng/L | 20 | <0.82 U | <0.82 U | <0.82 U | <0.79 U | <0.79 U | <0.83 U | <0.74 U | <0.78 U | <0.82 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.80 U | <0.80 U | <0.80 U | <0.77 U | <0.78 U | <0.81 U | <0.72 U | <0.76 U | <0.81 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.38 U | <0.38 U | <0.38 U | <0.36 U | <0.37 U | <0.38 U | <0.34 U | <0.36 U | <0.38 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.22 U | <0.22 U | <0.23 U | <0.20 U | <0.22 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **4.1** | **18.5** | **4.29** | **6.4** | **6.1** | **5.1** | **6.6** | **2.8** | **27** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **5.1** | **20.4** | **8.19** | **10.1** | **6.1** | **5.1** | **7.7** | **5** | **28.2** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 0.5 | 1.1 | 0.4 | 0.6 | 0.3 | 0.3 | 0.5 | 0.3 | 1.5 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1133 | 1134 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/24/21 | 04/30/21 | 04/30/21 | 04/30/21 | 04/30/21 | 04/23/21 | 04/22/21 | 04/22/21 | 05/05/21 |
| | | Sample Number | PWS1133-OS-042421-100 | PWS1134-OS-043021-100 | PWS-FD02-043021 | PWS1135-OS-043021-100 | PWS1136-OS-043021-100 | PWS1137-OS-042321-100 | PWS1138-OS-042221-100 | PWS1139-OS-042221-100 | PWS1140-OS-050421-100 |
| | | Address | 1719 Bainbridge Street | 1731 La Crescent Street | 1731 La Crescent Street | 1723 La Crescent Street | 1728 La Crescent Street | 1711 Caroline Street | 1636 Lakeshore Drive | 1619 La Crescent Street | 1640 Caroline Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **8.8** | **8.6** | **8.7** | **3.6 J** | **3.4 J** | **2.4 J** | **3.5 J** | **4.9** | <2.2 U |
| PFPeA | ng/L | -- | **5.2** | **0.47 J** | <0.43 U | <0.46 U | **1.5 J** | **1.3 J** | **0.71 J** | **1.3 J** | <0.46 U |
| PFHxA | ng/L | 150,000 | **5.4** | **0.82 J** | **0.77 J** | <0.55 U | **2.4** | **1.4 J** | **0.91 J** | **1.4 J** | <0.54 U |
| PFHpA | ng/L | -- | **3.6** | <0.24 U | <0.22 U | <0.24 U | **1.3 J** | **0.73 J** | **0.77 J** | **0.86 J** | <0.23 U |
| PFOA | ng/L | 20 | **8.5** | **2.5** | **2.4** | <0.80 U | **3.5** | **1.5 J** | **2.5** | **3.4** | <0.79 U |
| PFNA | ng/L | 30 | **0.38 J** | <0.26 U | <0.24 U | **0.57 J** | <0.24 U | **0.44 J** | <0.24 U | <0.24 U | <0.25 U |
| PFDA | ng/L | 300 | <0.29 U | **0.34 J** | <0.27 U | **0.56 J** | **0.30 J** | <0.30 U | <0.27 U | <0.28 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <0.97 U | <1.0 U | <1.0 U | <1.0 U | <0.97 U | <0.99 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.51 U | <0.52 U | <0.48 U | <0.52 U | <0.50 U | <0.52 U | <0.48 U | <0.50 U | <0.51 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.68 U | <0.69 U | <0.64 U | <0.69 U | <0.66 U | <0.70 U | <0.64 U | <0.66 U | <0.68 U |
| PFHxDA | ng/L | -- | <0.83 U | <0.84 U | <0.78 U | <0.84 U | <0.81 U | <0.85 U | <0.78 U | <0.80 U | <0.83 U |
| PFODA | ng/L | 400,000 | <0.87 U | <0.89 U | <0.83 U | <0.89 U | <0.85 U | <0.90 U | <0.83 U | <0.85 U | <0.88 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.2** | **12** | **13** | **12** | **40** | **2.5** | **4.7** | **2.8** | **0.72 J** |
| PFPeS | ng/L | -- | **0.56 J** | <0.28 U | **0.28 J** | <0.28 U | **0.58 J** | <0.29 U | **0.46 J** | **0.35 J** | <0.28 U |
| PFHxS | ng/L | 40 | **4.6** | **4.1** | **4.0** | **0.79 J** | **2.9** | **0.59 J** | **2.6** | **0.88 J** | **0.70 J** |
| PFHpS | ng/L | -- | **0.24 J** | <0.18 U | <0.17 U | <0.18 U | **0.32 J** | <0.18 U | <0.17 U | <0.17 U | <0.18 U |
| PFOS | ng/L | 20 | **7.9** | **4.1** | **4.0** | **9.1** | **6.5** | **4.2** | **2.9 I** | **3.8 I** | **1.9 I** |
| PFNS | ng/L | -- | <0.34 U | <0.35 U | <0.32 U | <0.35 U | <0.34 U | <0.35 U | <0.33 U | <0.33 U | <0.35 U |
| PFDS | ng/L | -- | <0.30 U | <0.30 U | <0.28 U | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U |
| PFDoS | ng/L | -- | <0.90 U | <0.92 U | <0.85 U | <0.91 U | <0.88 U | <0.92 U | <0.85 U | <0.87 U | <0.91 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.23 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U | <0.22 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.4 U | <2.2 U | <2.4 U | <2.3 U | <2.4 U | <2.2 U | <2.3 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.44 U | <0.40 U | <0.43 U | <0.42 U | <0.44 U | <0.40 U | <0.41 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | <0.62 U | <0.64 U | <0.59 U | <0.63 U | <0.61 U | <0.64 U | <0.59 U | <0.60 U | <0.63 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.0 J** | **2.0** | **1.4 J** | **1.5 J** | **2.7** | **2.2** | **1.4 J** | <0.88 U | **1.1 J** |
| NMeFOSA | ng/L | -- | <0.40 U | <0.41 U | <0.38 U | <0.41 U | <0.39 U | <0.41 U | <0.38 U | <0.39 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.81 U | <0.83 U | <0.76 U | <0.82 U | <0.79 U | <0.83 U | <0.76 U | <0.78 U | <0.81 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.79 U | <0.81 U | <0.75 U | <0.80 U | <0.77 U | <0.81 U | <0.75 U | <0.77 U | <0.79 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.38 U | <0.35 U | <0.38 U | <0.36 U | <0.38 U | <0.35 U | <0.36 U | <0.37 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.23 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U | <0.22 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.30 U | <0.28 U | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **16.4** | **6.6** | **6.4** | **9.1** | **10** | **5.7** | **5.4** | **7.2** | **1.9** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **17.4** | **8.6** | **7.8** | **10.6** | **12.7** | **7.9** | **6.8** | **7.2** | **3** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 1.0 | 0.5 | 0.5 | 0.6 | 0.7 | 0.4 | 0.4 | 0.4 | 0.2 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1141 | 1142 | 1142 | 1143 | 1144 | 1145 | 1145 | 1146 | 1147 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/28/21 | 04/23/21 | 04/23/21 | 04/24/21 | 04/25/21 | 04/21/21 | 04/21/21 | 04/22/21 | 04/29/21 |
| | | | Sample Number | PWS1141-OS-042821-100 | PWS1142-OS-042321-100 | PWS-FD02-042321 | PWS1143-OS-042421-100 | PWS1144-OS-042521-100 | PWS1145-OS-042121-100 | PWS-FD02-042121 | PWS1146-OS-042221-100 | PWS1147-OS-042921-100 |
| | | | Address | 1621 Caroline Street | 1650 Bainbridge Street | 1650 Bainbridge Street | 1631 Lakeshore Drive | 1649 Lakeshore Drive | 1630 Bainbridge Street | 1630 Bainbridge Street | 1638 Lakeshore Drive | 1605 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.2 U | **4.8** | **4.8** | **2.6 J** | **2.6 J** | **6.5** | **6.1** | **5.0** | **5.8** |
| PFPeA | ng/L | -- | <0.45 U | **1.7 J** | **1.6 J** | <0.42 U | **0.52 J** | **1.4 J** | **1.6 J** | <0.44 U | **0.82 J** |
| PFHxA | ng/L | 150,000 | <0.54 U | **2.3** | **2.3** | **0.50 J** | **0.64 J** | **1.8 J** | **2.0** | <0.52 U | <0.56 U |
| PFHpA | ng/L | -- | <0.23 U | **1.6 J** | **1.8 J** | <0.22 U | **0.30 J** | **1.6 J** | **1.9** | <0.23 U | <0.24 U |
| PFOA | ng/L | 20 | <0.79 U | **2.8** | **2.8** | <0.73 U | **1.4 J** | **8.9** | **8.4** | <0.77 U | **2.1** |
| PFNA | ng/L | 30 | <0.25 U | <0.25 U | <0.25 U | <0.23 U | <0.25 U | <0.25 U | <0.26 U | <0.24 U | <0.26 U |
| PFDA | ng/L | 300 | <0.29 U | <0.28 U | <0.29 U | <0.27 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <1.0 U | <0.95 U | <1.0 U | <1.0 U | <1.0 U | <0.99 U | <1.1 U |
| PFDoA | ng/L | 500 | <0.51 U | <0.50 U | <0.51 U | <0.47 U | <0.51 U | <0.52 U | <0.52 U | <0.50 U | <0.53 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U |
| PFTeA | ng/L | 10,000 | <0.67 U | <0.67 U | <0.68 U | <0.63 U | <0.68 U | <0.68 U | <0.69 U | <0.66 U | <0.70 U |
| PFHxDA | ng/L | -- | <0.82 U | <0.82 U | <0.83 U | <0.77 U | <0.83 U | <0.83 U | <0.84 U | <0.80 U | <0.86 U |
| PFODA | ng/L | 400,000 | <0.87 U | <0.86 U | <0.87 U | <0.81 U | <0.88 U | <0.88 U | <0.89 U | <0.85 U | <0.90 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.44 J** | **2.2** | **1.9** | **1.2 J** | **4.9** | **2.2** | **2.2** | **2.6** | **2.4** |
| PFPeS | ng/L | -- | <0.28 U | **0.70 J** | **0.71 J** | **0.33 J** | <0.28 U | **0.80 J** | **0.61 J** | **0.42 J** | **0.65 J** |
| PFHxS | ng/L | 40 | **1.2 J** | **3.4** | **3.3** | **1.2 J** | **0.66 J** | **10** | **10** | **2.1** | **2.1** |
| PFHpS | ng/L | -- | <0.18 U | <0.17 U | <0.18 U | <0.16 U | <0.18 U | **0.27 JI** | **0.51 J** | <0.17 U | **0.26 J** |
| PFOS | ng/L | 20 | **2.2 I** | **5.5 I** | **5.6 I** | **0.50 J** | **1.1 J** | **13** | **14** | <0.49 U | **9.7 I** |
| PFNS | ng/L | -- | <0.34 U | <0.34 U | <0.34 U | <0.32 U | <0.35 U | <0.35 U | <0.35 U | <0.33 U | <0.36 U |
| PFDS | ng/L | -- | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U |
| PFDoS | ng/L | -- | <0.90 U | <0.89 U | <0.90 U | <0.84 U | <0.91 U | <0.91 U | <0.92 U | <0.87 U | <0.93 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.3 U | <2.3 U | <2.2 U | <2.3 U | <2.3 U | <2.4 U | <2.3 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.42 U | <0.43 U | <0.40 U | <0.43 U | <0.43 U | <0.43 U | <0.41 U | <0.44 U |
| 10:2 FTSA | ng/L | -- | <0.62 U | <0.61 U | <0.62 U | <0.58 U | <0.63 U | <0.63 U | <0.63 U | <0.60 U | <0.64 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.91 U | **1.8** | **1.8 J** | **1.1 J** | **1.0 J** | <0.92 U | **3.7** | **2.6** | **0.98 J** |
| NMeFOSA | ng/L | -- | <0.40 U | <0.39 U | <0.40 U | <0.37 U | <0.40 U | <0.40 U | <0.41 U | <0.39 U | <0.41 U |
| NEtFOSA | ng/L | 20 | <0.80 U | <0.80 U | <0.81 U | <0.75 U | <0.81 U | <0.81 U | <0.82 U | <0.78 U | <0.84 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.79 U | <0.78 U | <0.79 U | <0.73 U | <0.79 U | <0.80 U | <0.80 U | <0.77 U | <0.82 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.37 U | <0.37 U | <0.34 U | <0.37 U | <0.37 U | <0.38 U | <0.36 U | <0.38 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.29 U | <0.30 U | <0.28 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **2.2** | **8.3** | **8.4** | **0.5** | **2.5** | **21.9** | **22.4** | ND | **11.8** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **2.2** | **10.1** | **10.2** | **1.6** | **3.5** | **21.9** | **26.1** | **2.6** | **12.78** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.6 | 0.6 | 0.1 | 0.2 | 1.3 | 1.6 | 0.2 | 0.7 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1152 | 1153 | 1154 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/29/21 | 05/05/21 | 05/05/21 | 04/28/21 | 04/22/21 | 04/22/21 | 04/22/21 | 04/21/21 | 05/06/21 |
| | | | Sample Number | PWS-FD02-042921 | PWS1148-IS-050521-100 | PWS1149-OS-050421-100 | PWS1150-OS-042821-100 | PWS1151-OS-042221-100 | PWS1152-OS-042221-100 | PWS-FD02-042221 | PWS1153-OS-042121-100 | PWS1154-OS-050621-100 |
| | | | Address | 1605 Bainbridge Street | 1516 Bainbridge Street | 1626 Bainbridge Street | 1606 Lakeshore Drive | 1619 Bainbridge Street | 1615 Bainbridge Street | 1615 Bainbridge Street | 1608 Caroline Street | 204 Goddard Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.7** | **2.6 J** | **2.6 J** | <2.2 U | **3.3 J** | **3.7 J** | **3.1 J** | <2.4 U | **2.4 J** |
| PFPeA | ng/L | -- | **0.90 J** | <0.44 U | <0.45 U | <0.45 U | <0.43 U | <0.44 U | <0.43 U | <0.49 U | <0.42 U |
| PFHxA | ng/L | 150,000 | <0.55 U | <0.51 U | <0.54 U | <0.53 U | **0.63 J** | <0.53 U | **0.51 J** | <0.58 U | <0.50 U |
| PFHpA | ng/L | -- | <0.24 U | <0.22 U | <0.23 U | <0.23 U | **0.25 J** | <0.23 U | <0.22 U | <0.25 U | <0.21 U |
| PFOA | ng/L | 20 | **1.8 J** | <0.75 U | **2.6** | <0.78 U | **1.4 J** | **0.78 J** | **0.83 J** | <0.85 U | <0.73 U |
| PFNA | ng/L | 30 | <0.25 U | <0.24 U | <0.25 U | <0.25 U | <0.24 U | <0.24 U | <0.24 U | <0.27 U | <0.23 U |
| PFDA | ng/L | 300 | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.27 U | <0.28 U | <0.28 U | <0.31 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <0.98 U | <1.0 U | <1.0 U | <0.97 U | <1.0 U | <0.98 U | <1.1 U | <0.94 U |
| PFDoA | ng/L | 500 | <0.52 U | <0.49 U | <0.51 U | <0.51 U | <0.49 U | <0.50 U | <0.49 U | <0.55 U | <0.47 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.69 U | <0.65 U | <0.67 U | <0.67 U | <0.65 U | <0.66 U | <0.65 U | <0.73 U | <0.62 U |
| PFHxDA | ng/L | -- | <0.84 U | <0.79 U | <0.82 U | <0.82 U | <0.79 U | <0.81 U | <0.79 U | <0.89 U | <0.76 U |
| PFODA | ng/L | 400,000 | <0.88 U | <0.83 U | <0.87 U | <0.86 U | <0.83 U | <0.85 U | <0.83 U | <0.94 U | <0.80 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.8 J** | **1.4 J** | **0.82 J** | **0.24 J** | **2.7** | **2.6** | **2.5** | **1.8 J** | **1.5 J** |
| PFPeS | ng/L | -- | **0.55 J** | **0.53 J** | **0.37 J** | <0.28 U | **0.46 J** | **0.28 J** | <0.27 U | <0.30 U | **0.26 J** |
| PFHxS | ng/L | 40 | **2.1** | **1.5 J** | **3.6** | **0.72 J** | **2.1** | **1.0 J** | **1.1 J** | **1.0 J** | **1.4 J** |
| PFHpS | ng/L | -- | **0.27 J** | <0.17 U | **0.21 J** | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.19 U | <0.16 U |
| PFOS | ng/L | 20 | **9.6 I** | **1.1 JI** | **9.6** | **3.9** | **3.4 I** | **3.0 I** | **3.0** | **1.1 J** | **6.4 I** |
| PFNS | ng/L | -- | <0.35 U | <0.33 U | <0.34 U | <0.34 U | <0.33 U | <0.34 U | <0.33 U | <0.37 U | <0.32 U |
| PFDS | ng/L | -- | <0.30 U | <0.28 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.32 U | <0.27 U |
| PFDoS | ng/L | -- | <0.91 U | <0.86 U | <0.90 U | <0.89 U | <0.86 U | <0.88 U | <0.86 U | <0.97 U | <0.83 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.21 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.24 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.2 U | <2.3 U | <2.3 U | <2.2 U | <2.3 U | <2.2 U | <2.5 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.41 U | <0.42 U | <0.42 U | <0.41 U | <0.42 U | <0.41 U | <0.46 U | <0.39 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.59 U | <0.62 U | <0.62 U | <0.59 U | <0.61 U | <0.59 U | <0.67 U | <0.57 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.92 U | <0.87 U | **1.0 J** | <0.90 U | **1.4 J** | <0.89 U | <0.87 U | <0.98 U | **2.1** |
| NMeFOSA | ng/L | -- | <0.40 U | <0.38 U | <0.40 U | <0.40 U | <0.38 U | <0.39 U | <0.38 U | <0.43 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.82 U | <0.77 U | <0.80 U | <0.80 U | <0.77 U | <0.79 U | <0.77 U | <0.87 U | <0.74 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.4 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.80 U | <0.75 U | <0.78 U | <0.78 U | <0.75 U | <0.77 U | <0.75 U | <0.85 U | <0.73 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.5 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.38 U | <0.36 U | <0.37 U | <0.37 U | <0.35 U | <0.36 U | <0.35 U | <0.40 U | <0.34 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.21 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.24 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.28 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.32 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **11.4** | **1.1** | **12.2** | **3.9** | **4.8** | **3.78** | **3.83** | **1.1** | **6.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **11.4** | **1.1** | **13.2** | **3.9** | **6.2** | **3.78** | **3.83** | **1.1** | **8.5** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 0.1 | 0.8 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.5 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1155 | 1156 | 1157 | 1158 | 1159 | 1159 | 1160 | 1161 | 1162 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/29/21 | 04/24/21 | 04/21/21 | 04/28/21 | 04/24/21 | 04/24/21 | 04/30/21 | 04/29/21 | 04/24/21 |
| | | | Sample Number | PWS1155-OS-042921-100 | PWS1156-OS-042421-100 | PWS1157-OS-042121-100 | PWS1158-OS-042821-100 | PWS1159-OS-042421-100 | PWS-FD02-042421 | PWS1160-OS-043021-100 | PWS1161-OS-042921-100 | PWS1162-OS-042421-100 |
| | | | Address | 1609 Caroline Street | 1607 Caroline Street | 1522 Caroline Street | 1617 Caroline Street | 1424 Bainbridge Street | 1424 Bainbridge Street | 1416 Bainbridge Street | 205 William Street | 1410 Caroline Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.1** | **13** | **4.6** | <2.3 U | <2.1 U | <2.1 U | <2.0 U | <2.2 U | <2.1 U |
| PFPeA | ng/L | -- | <0.46 U | **5.5** | **4.8** | <0.47 U | <0.42 U | <0.42 U | <0.41 U | <0.45 U | <0.43 U |
| PFHxA | ng/L | 150,000 | **0.96 J** | **3.3** | **5.0** | <0.55 U | <0.50 U | <0.50 U | <0.49 U | <0.54 U | <0.51 U |
| PFHpA | ng/L | -- | <0.23 U | **0.75 J** | **0.93 J** | <0.24 U | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.22 U |
| PFOA | ng/L | 20 | **1.7 J** | **3.2** | **1.9** | <0.81 U | <0.73 U | <0.74 U | <0.72 U | <0.79 U | <0.75 U |
| PFNA | ng/L | 30 | <0.25 U | <0.23 U | <0.24 U | <0.26 U | <0.23 U | <0.23 U | <0.23 U | <0.25 U | <0.24 U |
| PFDA | ng/L | 300 | <0.29 U | <0.27 U | <0.28 U | <0.29 U | <0.27 U | <0.27 U | <0.26 U | <0.29 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <0.95 U | <0.98 U | <1.0 U | <0.95 U | <0.95 U | <0.93 U | <1.0 U | <0.97 U |
| PFDoA | ng/L | 500 | <0.52 U | <0.47 U | <0.49 U | <0.52 U | <0.48 U | <0.48 U | <0.46 U | <0.51 U | <0.48 U |
| PFTriA | ng/L | -- | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.69 U | <0.63 U | <0.65 U | <0.69 U | <0.63 U | <0.63 U | <0.62 U | <0.67 U | <0.64 U |
| PFHxDA | ng/L | -- | <0.84 U | <0.77 U | <0.79 U | <0.85 U | <0.77 U | <0.77 U | <0.75 U | <0.82 U | <0.78 U |
| PFODA | ng/L | 400,000 | <0.88 U | <0.81 U | <0.83 U | <0.89 U | <0.81 U | <0.81 U | <0.79 U | <0.87 U | <0.83 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.1** | **6.1** | **2.1** | **0.78 J** | **0.55 J** | **0.80 J** | **0.41 J** | **0.70 J** | **0.58 J** |
| PFPeS | ng/L | -- | **0.29 J** | **0.61 J** | **0.40 J** | <0.29 U | <0.26 U | <0.26 U | <0.25 U | <0.28 U | <0.26 U |
| PFHxS | ng/L | 40 | **3.5** | **12** | **1.7 J** | **0.89 J** | **0.55 J** | **0.56 J** | **0.65 J** | <0.53 U | **2.0** |
| PFHpS | ng/L | -- | <0.18 U | **0.20 J** | **0.29 J** | <0.18 U | <0.16 U | <0.16 U | <0.16 U | <0.18 U | <0.17 U |
| PFOS | ng/L | 20 | **2.8** | **2.5 I** | **9.3** | **3.0** | **0.54 J** | <0.47 U | **0.53 J** | <0.50 U | <0.47 U |
| PFNS | ng/L | -- | <0.35 U | <0.32 U | <0.33 U | <0.35 U | <0.32 U | <0.32 U | <0.31 U | <0.34 U | <0.33 U |
| PFDS | ng/L | -- | <0.30 U | <0.28 U | <0.28 U | <0.30 U | <0.28 U | <0.28 U | <0.27 U | <0.30 U | <0.28 U |
| PFDoS | ng/L | -- | <0.91 U | <0.83 U | <0.86 U | <0.92 U | <0.84 U | <0.84 U | <0.82 U | <0.90 U | <0.85 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.21 U | <0.21 U | <0.23 U | <0.21 U | <0.21 U | <0.20 U | <0.22 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.1 U | <2.2 U | <2.4 U | <2.2 U | <2.2 U | <2.1 U | <2.3 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.40 U | <0.41 U | <0.44 U | <0.40 U | <0.40 U | <0.39 U | <0.43 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.58 U | <0.59 U | <0.64 U | <0.58 U | <0.58 U | <0.56 U | <0.62 U | <0.59 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.1 J** | **1.2 J** | **2.0** | <0.93 U | <0.85 U | <0.85 U | **1.5 J** | **2.1** | <0.86 U |
| NMeFOSA | ng/L | -- | <0.40 U | <0.37 U | <0.38 U | <0.41 U | <0.37 U | <0.37 U | <0.36 U | <0.40 U | <0.38 U |
| NEtFOSA | ng/L | 20 | <0.82 U | <0.75 U | <0.77 U | <0.83 U | <0.75 U | <0.75 U | <0.73 U | <0.80 U | <0.77 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.80 U | <0.73 U | <0.75 U | <0.81 U | <0.73 U | <0.74 U | <0.72 U | <0.79 U | <0.75 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.38 U | <0.34 U | <0.35 U | <0.38 U | <0.35 U | <0.35 U | <0.34 U | <0.37 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.21 U | <0.21 U | <0.23 U | <0.21 U | <0.21 U | <0.20 U | <0.22 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.28 U | <0.28 U | <0.30 U | <0.28 U | <0.28 U | <0.27 U | <0.30 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **4.5** | **5.7** | **11.2** | **3** | **0.54** | ND | **0.53** | ND | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **5.6** | **6.9** | **13.2** | **3** | **0.54** | ND | **2.03** | **2.1** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.4 | 0.6 | 0.7 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1163 | 1164 | 1165 | 1165 | 1166 | 1167 | 1168 | 1168 | 1169 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/20/21 | 04/28/21 | 04/25/21 | 04/25/21 | 05/05/21 | 04/26/21 | 04/20/21 | 04/20/21 | 04/19/21 |
| | | | Sample Number | PWS1163-OS-042021-100 | PWS1164-IS-042821-100 | PWS1165-OS-042521-100 | PWS-FD02-042521 | PWS1166-OS-050521-100 | PWS1167-OS-042621-100 | PWS1168-OS-042021-100 | PWS-FD02-042021 | PWS1169-OS-041921-100 |
| | | | Address | 1412 La Crescent Street | 1402 La Crescent Street | 1413 La Crescent Street | 1413 La Crescent Street | 1432 Caroline Street | 1408 Caroline Street | 1407 Richmond Bay Court | 1407 Richmond Bay Court | 1212 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **2.1 J** | **14** | <2.2 U | <2.2 U | **6.2** | <2.2 U | **4.7** | **4.8 J** | <2.1 U |
| PFPeA | ng/L | -- | **0.60 J** | **6.8** | <0.44 U | <0.44 U | **6.8** | **2.5** | **2.8** | **2.7** | <0.43 U |
| PFHxA | ng/L | 150,000 | **0.52 J** | **7.6** | **0.56 J** | <0.52 U | **6.8** | **3.5** | **2.3** | **2.1** | <0.50 U |
| PFHpA | ng/L | -- | <0.22 U | **2.7** | <0.23 U | <0.23 U | **8.8** | **2.2** | **1.7 J** | **1.6 J** | <0.22 U |
| PFOA | ng/L | 20 | <0.76 U | **2.6** | <0.77 U | <0.77 U | **9.3** | **4.4** | **2.2** | **2.3** | <0.74 U |
| PFNA | ng/L | 30 | <0.24 U | <0.25 U | <0.25 U | <0.24 U | <0.25 U | <0.25 U | <0.25 U | <0.27 U | <0.23 U |
| PFDA | ng/L | 300 | <0.28 U | <0.29 U | <0.28 U | <0.28 U | <0.28 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <0.98 U | <1.0 U | <1.0 U | <0.99 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <0.96 U |
| PFDoA | ng/L | 500 | <0.49 U | <0.51 U | <0.50 U | <0.50 U | <0.50 U | <0.51 U | <0.51 U | <0.54 U | <0.48 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.65 U | <0.68 U | <0.66 U | <0.66 U | <0.66 U | <0.68 U | <0.68 U | <0.72 U | <0.63 U |
| PFHxDA | ng/L | -- | <0.79 U | <0.83 U | <0.81 U | <0.80 U | <0.81 U | <0.83 U | <0.82 U | <0.87 U | <0.77 U |
| PFODA | ng/L | 400,000 | <0.84 U | <0.88 U | <0.85 U | <0.85 U | <0.86 U | <0.88 U | <0.87 U | <0.92 U | <0.82 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.9** | **9.1** | **0.83 J** | **0.68 J** | **9.0** | **2.6** | **0.99 J** | **0.90 J** | <0.17 U |
| PFPeS | ng/L | -- | <0.27 U | **4.4** | <0.27 U | **0.29 JI** | **0.43 J** | **0.49 J** | **0.66 J** | **0.81 J** | <0.26 U |
| PFHxS | ng/L | 40 | <0.51 U | **8.0** | **0.60 J** | **0.72 J** | **2.1** | **3.4** | **1.7 J** | **1.6 J** | <0.50 U |
| PFHpS | ng/L | -- | <0.17 U | <0.18 U | <0.17 U | <0.17 U | **0.19 J** | <0.18 U | <0.18 U | <0.19 U | <0.17 U |
| PFOS | ng/L | 20 | <0.48 U | **1.1 J** | **0.82 JI** | **0.75 JI** | **3.4** | **1.7 JIB** | **0.87 J** | <0.53 U | <0.47 U |
| PFNS | ng/L | -- | <0.33 U | <0.34 U | <0.34 U | <0.33 U | <0.34 U | <0.35 U | <0.34 U | <0.36 U | <0.32 U |
| PFDS | ng/L | -- | <0.29 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U |
| PFDoS | ng/L | -- | <0.86 U | <0.90 U | <0.88 U | <0.87 U | <0.88 U | <0.91 U | <0.90 U | <0.95 U | <0.84 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.24 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.2 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.5 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.41 U | <0.43 U | <0.42 U | <0.41 U | <0.42 U | <0.43 U | <0.43 U | <0.45 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.60 U | <0.62 U | <0.61 U | <0.60 U | <0.61 U | <0.63 U | <0.62 U | <0.66 U | <0.58 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.87 U | <0.91 U | **1.6 J** | **1.4 J** | **0.92 J** | **5.4** | <0.91 U | <0.96 U | <0.85 U |
| NMeFOSA | ng/L | -- | <0.38 U | <0.40 U | <0.39 U | <0.39 U | <0.39 U | <0.40 U | <0.40 U | <0.42 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.78 U | <0.81 U | <0.79 U | <0.78 U | <0.79 U | <0.81 U | <0.81 U | <0.85 U | <0.76 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.76 U | <0.79 U | <0.77 U | <0.77 U | <0.77 U | <0.79 U | <0.79 U | <0.84 U | <0.74 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.5 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.36 U | <0.37 U | <0.36 U | <0.36 U | <0.36 U | <0.37 U | <0.37 U | <0.39 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.24 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.29 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **3.7** | **0.82** | **0.75** | **12.7** | **6.1** | **3.07** | **2.3** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | ND | **3.7** | **2.42** | **2.15** | **13.62** | **11.5** | **3.07** | **2.3** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.0 | 0.4 | 0.1 | 0.1 | 0.7 | 0.7 | 0.2 | 0.2 | 0.0 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 04/19/21 | 05/05/21 | 04/19/21 | 04/22/21 | 04/30/21 | 04/24/21 | 04/23/21 | 04/28/21 | 04/28/21 |
| | | Sample Number | PWS1170-OS-041921-100 | PWS1171-IS-050421-100 | PWS1172-OS-041921-100 | PWS1173-OS-042221-100 | PWS1174-OS-043021-100 | PWS1175-OS-042421-100 | PWS1176-OS-042321-100 | PWS1177-OS-042821-100 | PWS1178-OS-042821-100 |
| | | Address | 1213 La Crescent Place | 1303 La Crescent Street | 126 Washburn Street | 1334 Caroline Street | 1314 Caroline Street | 1305 La Crescent Street | 1311 Caroline Street | 125 Sperbeck Street | 1304 La Crescent Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.2 U | <2.2 U | **2.8 J** | <2.0 U | **7.5** | **6.3** | **14** | **4.6 J** | **11** |
| PFPeA | ng/L | -- | <0.46 U | <0.45 U | <0.44 U | <0.41 U | **1.7 J** | **3.1** | **4.8** | **2.2** | **1.3 J** |
| PFHxA | ng/L | 150,000 | <0.54 U | <0.54 U | <0.52 U | <0.48 U | **0.88 J** | **3.5** | **4.9** | **1.6 J** | **1.1 J** |
| PFHpA | ng/L | -- | <0.23 U | <0.23 U | <0.22 U | <0.21 U | <0.23 U | **1.9** | **3.3** | **0.80 J** | **0.52 J** |
| PFOA | ng/L | 20 | <0.80 U | <0.79 U | <0.76 U | <0.71 U | **2.4** | **4.0** | **7.6** | **2.1** | **2.6** |
| PFNA | ng/L | 30 | <0.25 U | <0.25 U | <0.24 U | <0.22 U | <0.25 U | <0.23 U | <0.26 U | <0.26 U | <0.24 U |
| PFDA | ng/L | 300 | <0.29 U | <0.29 U | <0.28 U | <0.26 U | <0.28 U | <0.27 U | <0.30 U | <0.30 U | <0.28 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <0.98 U | <0.91 U | <1.0 U | <0.96 U | <1.0 U | <1.1 U | <0.99 U |
| PFDoA | ng/L | 500 | <0.51 U | <0.51 U | <0.49 U | <0.46 U | <0.51 U | <0.48 U | <0.52 U | <0.53 U | <0.50 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.3 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.68 U | <0.67 U | <0.65 U | <0.61 U | <0.67 U | <0.64 U | <0.70 U | <0.70 U | <0.66 U |
| PFHxDA | ng/L | -- | <0.83 U | <0.82 U | <0.80 U | <0.74 U | <0.82 U | <0.77 U | <0.85 U | <0.86 U | <0.80 U |
| PFODA | ng/L | 400,000 | <0.88 U | <0.87 U | <0.84 U | <0.78 U | <0.86 U | <0.82 U | <0.90 U | <0.90 U | <0.85 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | <0.19 U | **0.23 J** | <0.18 U | <0.17 U | **1.0 J** | **3.2** | **4.1** | **3.2** | **100** |
| PFPeS | ng/L | -- | <0.28 U | <0.28 U | <0.27 U | <0.25 U | **0.28 J** | **0.43 J** | **1.0 J** | **0.32 J** | **0.38 J** |
| PFHxS | ng/L | 40 | <0.53 U | <0.53 U | **1.4 J** | <0.47 U | **0.97 J** | **3.5** | **2.7** | **1.3 J** | **1.3 J** |
| PFHpS | ng/L | -- | <0.18 U | <0.18 U | <0.17 U | <0.16 U | <0.17 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U |
| PFOS | ng/L | 20 | <0.51 U | <0.50 U | **0.58 J** | <0.45 U | <0.50 U | **5.9** | **5.7 I** | **4.9 I** | **4.5** |
| PFNS | ng/L | -- | <0.35 U | <0.34 U | <0.33 U | <0.31 U | <0.34 U | <0.32 U | <0.35 U | <0.36 U | <0.33 U |
| PFDS | ng/L | -- | <0.30 U | <0.30 U | <0.29 U | <0.27 U | <0.29 U | <0.28 U | <0.30 U | <0.31 U | <0.29 U |
| PFDoS | ng/L | -- | <0.91 U | <0.90 U | <0.87 U | <0.81 U | <0.89 U | <0.84 U | <0.92 U | <0.93 U | <0.88 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.22 U | <0.21 U | <0.20 U | <0.22 U | <0.21 U | <0.23 U | <0.23 U | <0.22 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.3 U | <2.2 U | <2.1 U | <2.3 U | <2.2 U | <2.4 U | <2.4 U | <2.3 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.43 U | <0.41 U | <0.38 U | <0.42 U | <0.40 U | <0.44 U | <0.44 U | <0.42 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.62 U | <0.60 U | <0.56 U | <0.62 U | <0.58 U | <0.64 U | <0.64 U | <0.60 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.92 U | **2.0** | <0.88 U | <0.81 U | <0.90 U | **0.88 J** | <0.93 U | <0.94 U | <0.88 U |
| NMeFOSA | ng/L | -- | <0.40 U | <0.40 U | <0.38 U | <0.36 U | <0.40 U | <0.37 U | <0.41 U | <0.41 U | <0.39 U |
| NEtFOSA | ng/L | 20 | <0.81 U | <0.80 U | <0.78 U | <0.72 U | <0.80 U | <0.76 U | <0.83 U | <0.84 U | <0.78 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.0 U | <1.1 U | <1.2 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.3 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.80 U | <0.79 U | <0.76 U | <0.71 U | <0.78 U | <0.74 U | <0.81 U | <0.82 U | <0.77 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.3 U | <1.2 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.37 U | <0.36 U | <0.33 U | <0.37 U | <0.35 U | <0.38 U | <0.38 U | <0.36 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.22 U | <0.21 U | <0.20 U | <0.22 U | <0.21 U | <0.23 U | <0.23 U | <0.22 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.30 U | <0.29 U | <0.27 U | <0.29 U | <0.28 U | <0.30 U | <0.31 U | <0.29 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | ND | **0.58** | ND | **2.4** | **9.9** | **13.3** | **7** | **7.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | ND | **2** | **0.58** | ND | **2.4** | **10.78** | **13.3** | **7** | **7.1** |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.6 | 0.7 | 0.4 | 0.4 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1179 | 1180 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/20/21 | 04/29/21 | 04/29/21 | 04/19/21 | 04/26/21 | 04/20/21 | 04/21/21 | 05/07/21 | 04/28/21 |
| | | | Sample Number | PWS1179-OS-042021-100 | PWS1180-OS-042921-100 | PWS-FD01-042921 | PWS1181-OS-041921-100 | PWS1182-OS-042621-100 | PWS1183-OS-042021-100 | PWS1184-OS-042121-100 | PWS1185-OS-050721-100 | PWS1186-IS-042821-100 |
| | | | Address | 1322 La Crescent St | 110 Sperbeck Street | 110 Sperbeck Street | 124 Sperbeck Street | 121 Walnut Street | 139 Usher Street | 1111 La Crescent Street | 128 Locust Street | 907 La Crescent Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **2.6 J** | <2.2 U | <2.2 U | <2.2 U | **3.1 J** | **5.9** | **4.7** | **3.0 J** | **2.7 J** |
| PFPeA | ng/L | -- | **2.0** | <0.45 U | <0.44 U | <0.44 U | <0.45 U | <0.44 U | **0.82 J** | **0.59 J** | <0.46 U |
| PFHxA | ng/L | 150,000 | **1.4 J** | <0.54 U | <0.53 U | <0.52 U | **0.93 J** | <0.52 U | **2.8** | **0.77 J** | <0.55 U |
| PFHpA | ng/L | -- | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.23 U | <0.23 U | **0.46 J** | **0.35 J** | <0.24 U |
| PFOA | ng/L | 20 | <0.79 U | <0.79 U | <0.77 U | <0.77 U | **1.2 J** | <0.77 U | <0.79 U | **1.5 J** | <0.80 U |
| PFNA | ng/L | 30 | <0.25 U | <0.25 U | <0.24 U | <0.24 U | <0.25 U | <0.24 U | <0.25 U | <0.23 U | <0.25 U |
| PFDA | ng/L | 300 | <0.29 U | <0.29 U | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.29 U | <0.26 U | <0.29 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <1.0 U | <1.0 U | <0.99 U | <1.0 U | <0.99 U | <1.0 U | <0.92 U | <1.0 U |
| PFDoA | ng/L | 500 | <0.51 U | <0.51 U | <0.50 U | <0.50 U | <0.50 U | <0.50 U | <0.51 U | <0.46 U | <0.52 U |
| PFTriA | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| PFTeA | ng/L | 10,000 | <0.68 U | <0.68 U | <0.66 U | <0.66 U | <0.67 U | <0.66 U | <0.67 U | <0.61 U | <0.69 U |
| PFHxDA | ng/L | -- | <0.83 U | <0.82 U | <0.81 U | <0.80 U | <0.82 U | <0.80 U | <0.82 U | <0.74 U | <0.84 U |
| PFODA | ng/L | 400,000 | <0.88 U | <0.87 U | <0.85 U | <0.85 U | <0.86 U | <0.85 U | <0.87 U | <0.78 U | <0.89 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.82 J** | **0.22 J** | **0.52 J** | <0.18 U | **2.1** | **4.0** | **2.3** | **1.8** | **2.6** |
| PFPeS | ng/L | -- | **0.28 J** | <0.28 U | <0.27 U | <0.27 U | **1.7 J** | **0.52 J** | **1.5 J** | **0.93 J** | <0.28 U |
| PFHxS | ng/L | 40 | **1.6 J** | <0.53 U | <0.52 U | <0.51 U | **14** | **1.7 J** | **37** | **1.7** | **1.8 J** |
| PFHpS | ng/L | -- | <0.18 U | <0.18 U | <0.17 U | <0.17 U | **0.26 J** | **0.19 J** | <0.18 U | <0.16 U | <0.18 U |
| PFOS | ng/L | 20 | <0.50 U | <0.50 U | <0.49 U | <0.49 U | **7.6 B** | **3.7 I** | **1.9** | **3.9** | **4.9** |
| PFNS | ng/L | -- | <0.35 U | <0.34 U | <0.34 U | <0.33 U | <0.34 U | <0.33 U | <0.34 U | <0.31 U | <0.35 U |
| PFDS | ng/L | -- | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U | <0.30 U |
| PFDoS | ng/L | -- | <0.91 U | <0.90 U | <0.88 U | <0.88 U | <0.89 U | <0.88 U | <0.90 U | <0.81 U | <0.91 U |
| 4:2 FTSA | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.20 U | <0.23 U |
| 6:2 FTSA | ng/L | -- | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.3 U | <2.1 U | <2.4 U |
| 8:2 FTSA | ng/L | -- | <0.43 U | <0.43 U | <0.42 U | <0.42 U | <0.42 U | <0.42 U | <0.43 U | <0.38 U | <0.43 U |
| 10:2 FTSA | ng/L | -- | <0.63 U | <0.62 U | <0.61 U | <0.60 U | <0.62 U | <0.61 U | <0.62 U | <0.56 U | <0.63 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.92 U | **1.5 J** | **1.9** | <0.88 U | <0.90 U | <0.89 U | <0.91 U | **0.95 J** | <0.92 U |
| NMeFOSA | ng/L | -- | <0.40 U | <0.40 U | <0.39 U | <0.39 U | <0.39 U | <0.39 U | <0.40 U | <0.36 U | <0.40 U |
| NEtFOSA | ng/L | 20 | <0.81 U | <0.81 U | <0.79 U | <0.79 U | <0.80 U | <0.79 U | <0.80 U | <0.73 U | <0.82 U |
| NMeFOSAA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U |
| NEtFOSAA | ng/L | 20 | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| NMeFOSE | ng/L | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U |
| NEtFOSE | ng/L | 20 | <0.79 U | <0.79 U | <0.77 U | <0.77 U | <0.78 U | <0.77 U | <0.79 U | <0.71 U | <0.80 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U |
| DONA | ng/L | 3,000 | <0.37 U | <0.37 U | <0.36 U | <0.36 U | <0.37 U | <0.36 U | <0.37 U | <0.33 U | <0.38 U |
| 9Cl-PF3ONS | ng/L | -- | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.20 U | <0.23 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U | <0.30 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | ND | ND | ND | **8.8** | **3.7** | **1.9** | **5.4** | **4.9** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | ND | **1.5** | **1.9** | ND | **8.8** | **3.7** | **1.9** | **6.35** | **4.9** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.0 | 0.1 | 0.1 | 0.0 | 0.8 | 0.2 | 1.0 | 0.4 | 0.3 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 04/27/21 | 04/19/21 | 04/30/21 | 04/19/21 | 04/29/21 | 05/05/21 | 05/07/21 | 05/06/21 | 04/30/21 |
| | | | Sample Number | PWS1187-OS-042721-100 | PWS1188-IS-041921-100 | PWS1189-OS-043021-100 | PWS1190-OS-041921-100 | PWS1191-OS-042921-100 | PWS1192-OS-050421-100 | PWS1193-OS-050721-100 | PWS1194-OS-050621-100 | PWS1195-OS-043021-100 |
| | | | Address | 148 Schultz Drive | 1007 La Crescent Street | 132 Locust Street | 1508 Nakomis Avenue | 1357 Nakomis Avenue | 1524 Nakomis Avenue | 615 Sanborn Street | 1521 Nakomis Avenue | 1344 Nakomis Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **4.0 J** | **9.1** | **2.8 J** | <2.1 U | <2.2 U | <2.1 U | **83** | <2.0 U | <2.5 U |
| PFPeA | ng/L | -- | <0.42 U | <0.43 U | <0.45 U | <0.43 U | <0.45 U | <0.42 U | **9.0** | <0.41 U | <0.51 U |
| PFHxA | ng/L | 150,000 | **0.93 J** | <0.51 U | <0.53 U | <0.51 U | <0.53 U | <0.50 U | **5.9** | <0.48 U | <0.61 U |
| PFHpA | ng/L | -- | **0.60 J** | <0.22 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U | **1.4 J** | <0.21 U | <0.26 U |
| PFOA | ng/L | 20 | **4.6** | <0.74 U | **0.97 J** | <0.75 U | <0.78 U | <0.73 U | **66** | <0.70 U | <0.89 U |
| PFNA | ng/L | 30 | <0.23 U | <0.24 U | <0.25 U | <0.24 U | <0.25 U | <0.23 U | **0.40 J** | <0.22 U | <0.28 U |
| PFDA | ng/L | 300 | <0.27 U | <0.27 U | **0.31 J** | <0.27 U | <0.28 U | <0.27 U | <0.26 U | <0.26 U | **0.36 J** |
| PFUnA | ng/L | 3,000 | <0.94 U | <0.96 U | <1.0 U | <0.97 U | <1.0 U | <0.94 U | <0.92 U | <0.91 U | <1.1 U |
| PFDoA | ng/L | 500 | <0.47 U | <0.48 U | <0.50 U | <0.48 U | <0.50 U | <0.47 U | <0.46 U | <0.46 U | <0.57 U |
| PFTriA | ng/L | -- | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.4 U |
| PFTeA | ng/L | 10,000 | <0.63 U | <0.64 U | <0.67 U | <0.64 U | <0.67 U | <0.63 U | <0.61 U | <0.60 U | <0.76 U |
| PFHxDA | ng/L | -- | <0.76 U | <0.78 U | <0.81 U | <0.78 U | <0.81 U | <0.76 U | <0.75 U | <0.74 U | <0.93 U |
| PFODA | ng/L | 400,000 | <0.81 U | <0.82 U | <0.86 U | <0.83 U | <0.86 U | <0.81 U | <0.79 U | <0.78 U | <0.98 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.7 I** | **4.1** | **1.6 J** | **0.86 J** | <0.18 U | **11** | **7.4** | **6.1** | <0.21 U |
| PFPeS | ng/L | -- | **0.91 J** | **0.73 J** | **1.3 J** | **0.40 J** | <0.27 U | **7.7** | **1.4 J** | **3.3** | <0.31 U |
| PFHxS | ng/L | 40 | **1.7 I** | **2.7** | **2.1** | **0.68 J** | <0.52 U | **11** | **5.0** | **3.7** | <0.60 U |
| PFHpS | ng/L | -- | <0.16 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | **0.24 J** | <0.16 U | <0.16 U | <0.20 U |
| PFOS | ng/L | 20 | **1.4 J** | **9.1** | **5.6 I** | <0.48 U | <0.49 U | **0.66 J** | **24** | <0.45 U | <0.56 U |
| PFNS | ng/L | -- | <0.32 U | <0.32 U | <0.34 U | <0.33 U | <0.34 U | <0.32 U | <0.31 U | <0.31 U | <0.39 U |
| PFDS | ng/L | -- | <0.27 U | <0.28 U | <0.29 U | <0.28 U | <0.29 U | <0.27 U | <0.27 U | <0.27 U | <0.33 U |
| PFDoS | ng/L | -- | <0.83 U | <0.85 U | <0.89 U | <0.85 U | <0.89 U | <0.83 U | <0.81 U | <0.80 U | <1.0 U |
| 4:2 FTSA | ng/L | -- | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.20 U | <0.20 U | <0.25 U |
| 6:2 FTSA | ng/L | -- | <2.1 U | <2.2 U | <2.3 U | <2.2 U | <2.3 U | <2.1 U | <2.1 U | <2.1 U | <2.6 U |
| 8:2 FTSA | ng/L | -- | <0.40 U | <0.40 U | <0.42 U | <0.41 U | <0.42 U | <0.39 U | <0.39 U | <0.38 U | <0.48 U |
| 10:2 FTSA | ng/L | -- | <0.58 U | <0.59 U | <0.61 U | <0.59 U | <0.61 U | <0.58 U | <0.56 U | <0.56 U | <0.70 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.84 U | <0.86 U | **1.3 J** | **2.6** | <0.90 U | <0.84 U | **0.88 J** | <0.81 U | **1.9 J** |
| NMeFOSA | ng/L | -- | <0.37 U | <0.38 U | <0.39 U | <0.38 U | <0.39 U | <0.37 U | <0.36 U | <0.36 U | <0.45 U |
| NEtFOSA | ng/L | 20 | <0.75 U | <0.76 U | <0.79 U | <0.77 U | <0.80 U | <0.75 U | <0.73 U | <0.72 U | <0.91 U |
| NMeFOSAA | ng/L | -- | <1.0 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.0 U | <0.99 U | <1.3 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.4 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.5 U |
| NEtFOSE | ng/L | 20 | <0.73 U | <0.74 U | <0.78 U | <0.75 U | <0.78 U | <0.73 U | <0.71 U | <0.70 U | <0.89 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.2 U | <1.6 U |
| DONA | ng/L | 3,000 | <0.34 U | <0.35 U | <0.37 U | <0.35 U | <0.37 U | <0.34 U | <0.34 U | <0.33 U | <0.42 U |
| 9Cl-PF3ONS | ng/L | -- | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.20 U | <0.20 U | <0.25 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.27 U | <0.28 U | <0.29 U | <0.28 U | <0.29 U | <0.27 U | <0.27 U | <0.27 U | <0.33 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **6** | **9.1** | **6.57** | ND | ND | **0.66** | **90** | ND | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **6** | **9.1** | **7.87** | **2.6** | ND | **0.66** | **90.88** | ND | **1.9** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.3 | 0.5 | 0.4 | 0.1 | 0.0 | 0.3 | 4.7 | 0.1 | 0.1 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 05/07/21 | 05/07/21 | 05/07/21 | 04/28/21 | 04/26/21 | 05/07/21 | 05/06/21 | 05/06/21 | 05/04/21 |
| | | | Sample Number | PWS1196-OS-050721-100 | PWS1197-OS-050721-100 | PWS1198-IS-050721-100 | PWS1199-IS-042821-100 | PWS1200-OS-042621-100 | PUB1201-TN-050721-100 | PUB1202-TN-050621-100 | PWS1203-OS-050621-100 | PUB1204-TN-050421-100 |
| | | | Address | 537 Hinkley Road | 814 Lori Place | 1727 Bainbridge Street | 1612 Nakomis Avenue | 1611 Nakomis Avenue | 131 Clinton Street | 1303 Bainbridge Street | 1315 Caroline Street | 1900 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.0** | **7.3** | **6.0** | <2.2 U | <2.2 U | **3.5 J** | <2.3 U | **7.4** | **8.2** |
| PFPeA | ng/L | -- | **1.6 J** | <0.41 U | **2.1** | <0.45 U | <0.45 U | <0.46 U | <0.47 U | **2.7** | **2.9** |
| PFHxA | ng/L | 150,000 | **1.1 J** | <0.49 U | **5.0** | <0.53 U | <0.54 U | <0.55 U | <0.56 U | **1.9** | **2.5** |
| PFHpA | ng/L | -- | **0.55 J** | <0.21 U | **1.5 J** | <0.23 U | <0.23 U | <0.24 U | <0.24 U | **0.98 J** | **2.4** |
| PFOA | ng/L | 20 | **2.6** | <0.71 U | **2.8** | <0.78 U | <0.79 U | <0.80 U | <0.82 U | **2.6** | **2.2** |
| PFNA | ng/L | 30 | <0.23 U | **0.35 J** | <0.22 U | <0.25 U | <0.25 U | <0.25 U | <0.26 U | <0.23 U | <0.23 U |
| PFDA | ng/L | 300 | <0.26 U | **0.50 J** | <0.25 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.27 U | <0.27 U |
| PFUnA | ng/L | 3,000 | <0.93 U | <0.92 U | <0.89 U | <1.0 U | <1.0 U | <1.0 U | <1.1 U | <0.95 U | <0.95 U |
| PFDoA | ng/L | 500 | <0.47 U | <0.46 U | <0.45 U | <0.51 U | <0.51 U | <0.52 U | <0.53 U | <0.47 U | <0.48 U |
| PFTriA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.62 U | <0.61 U | <0.59 U | <0.67 U | <0.68 U | <0.69 U | <0.70 U | <0.63 U | <0.63 U |
| PFHxDA | ng/L | -- | <0.75 U | <0.75 U | <0.72 U | <0.82 U | <0.83 U | <0.84 U | <0.86 U | <0.77 U | <0.77 U |
| PFODA | ng/L | 400,000 | <0.80 U | <0.79 U | <0.76 U | <0.87 U | <0.87 U | <0.89 U | <0.91 U | <0.81 U | <0.81 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.9** | **8.8** | **8.8** | **7.9** | <0.19 U | **0.48 J** | **0.45 J** | **1.6 J** | **0.89 J** |
| PFPeS | ng/L | -- | **0.40 J** | <0.25 U | **0.39 J** | **6.7** | <0.28 U | <0.28 U | <0.29 U | **1.1 J** | <0.26 U |
| PFHxS | ng/L | 40 | **1.6 J** | **1.0 J** | **2.4** | **15** | <0.53 U | <0.54 U | **0.80 J** | **3.1** | **2.7** |
| PFHpS | ng/L | -- | **0.16 J** | <0.16 U | <0.15 U | <0.17 U | <0.18 U | <0.18 U | <0.18 U | **0.28 J** | <0.16 U |
| PFOS | ng/L | 20 | **7.1** | **6.9** | **2.8** | **0.85 J** | <0.50 U | <0.51 U | **2.0 B** | **3.3 I** | **2.2 I** |
| PFNS | ng/L | -- | <0.31 U | <0.31 U | <0.30 U | <0.34 U | <0.34 U | <0.35 U | <0.36 U | <0.32 U | <0.32 U |
| PFDS | ng/L | -- | <0.27 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U | <0.28 U |
| PFDoS | ng/L | -- | <0.82 U | <0.82 U | <0.79 U | <0.89 U | <0.90 U | <0.91 U | <0.94 U | <0.83 U | <0.84 U |
| 4:2 FTSA | ng/L | -- | <0.20 U | <0.20 U | <0.19 U | <0.22 U | <0.22 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U |
| 6:2 FTSA | ng/L | -- | <2.1 U | <2.1 U | <2.0 U | <2.3 U | <2.3 U | <2.4 U | <2.4 U | <2.1 U | <2.2 U |
| 8:2 FTSA | ng/L | -- | <0.39 U | <0.39 U | <0.37 U | <0.42 U | <0.43 U | <0.43 U | <0.44 U | <0.40 U | <0.40 U |
| 10:2 FTSA | ng/L | -- | <0.57 U | <0.56 U | <0.54 U | <0.62 U | <0.62 U | <0.63 U | <0.65 U | <0.58 U | <0.58 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.1 J** | **1.1 J** | **0.94 J** | <0.90 U | <0.91 U | <0.92 U | <0.95 U | **0.85 J** | **3.6** |
| NMeFOSA | ng/L | -- | <0.36 U | <0.36 U | <0.35 U | <0.40 U | <0.40 U | <0.41 U | <0.41 U | <0.37 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.74 U | <0.73 U | <0.70 U | <0.80 U | <0.81 U | <0.82 U | <0.84 U | <0.75 U | <0.75 U |
| NMeFOSAA | ng/L | -- | <1.0 U | <1.0 U | <0.97 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.2 U | <1.1 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.72 U | <0.71 U | <0.69 U | <0.78 U | <0.79 U | <0.80 U | <0.82 U | <0.73 U | <0.74 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.3 U | <1.2 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.34 U | <0.34 U | <0.32 U | <0.37 U | <0.37 U | <0.38 U | <0.39 U | <0.34 U | <0.35 U |
| 9Cl-PF3ONS | ng/L | -- | <0.20 U | <0.20 U | <0.19 U | <0.22 U | <0.22 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.27 U | <0.27 U | <0.26 U | <0.29 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U | <0.28 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **9.7** | **6.9** | **5.6** | **0.85** | ND | ND | **2** | **5.9** | **4.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **10.8** | **8** | **6.54** | **0.85** | ND | ND | **2** | **6.75** | **8** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.1 | 0.4 | 0.5 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | | Location | 1205 | 1206 | 1207 | 1209 | 1210 | 1212 | 1213 | 1214 | 1214 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 05/05/21 | 05/05/21 | 05/04/21 | 05/06/21 | 05/07/21 | 05/05/21 | 05/05/21 | 05/05/21 | 05/05/21 |
| | | | Sample Number | PUB1205-TN-050521-100 | PUB1206-TN-050521-100 | PUB1207-TN-050421-100 | PUB1209-TN-050621-100 | PUB1210-TN-050721-100 | PUB1212-TN-050521-100 | PUB1213-TN-050521-100 | PUB1214-TN-050521-100 | PUB-FD01-050521 |
| | | | Address | 3600 Lakeshore Drive | 2100 Bainbridge Street | 2100 Bainbridge Street | 1311 La Crescent Place | 328 Goddard Street | 2548 Lakeshore Drive | 617 Plainview Road | 2219 Bainbridge Street | 2219 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.0 U | <2.0 U | <2.1 U | <2.3 U | <2.3 U | **48** | **23** | **2.1 J** | **2.3 J** |
| PFPeA | ng/L | -- | <0.42 U | <0.41 U | <0.43 U | <0.48 U | <0.46 U | **4.9** | **1.6** | **0.56 J** | **0.60 J** |
| PFHxA | ng/L | 150,000 | <0.49 U | <0.48 U | **0.60 J** | <0.56 U | <0.55 U | **5.2** | **2.6** | <0.51 U | **0.72 J** |
| PFHpA | ng/L | -- | <0.21 U | <0.21 U | <0.22 U | <0.24 U | <0.24 U | **2.6** | **1.2 J** | <0.22 U | <0.21 U |
| PFOA | ng/L | 20 | <0.72 U | <0.70 U | **1.3 J** | <0.82 U | <0.80 U | **19** | **6.6** | **1.2 J** | **1.2 J** |
| PFNA | ng/L | 30 | <0.23 U | <0.22 U | <0.24 U | <0.26 U | <0.26 U | <0.23 U | <0.22 U | <0.24 U | <0.23 U |
| PFDA | ng/L | 300 | <0.26 U | <0.26 U | <0.27 U | <0.30 U | <0.29 U | <0.26 U | <0.25 U | <0.27 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <0.93 U | <0.91 U | <0.97 U | <1.1 U | <1.0 U | <0.93 U | <0.90 U | <0.96 U | <0.93 U |
| PFDoA | ng/L | 500 | <0.47 U | <0.46 U | <0.48 U | <0.53 U | <0.52 U | <0.47 U | <0.45 U | <0.48 U | <0.46 U |
| PFTriA | ng/L | -- | <1.1 U | <1.1 U | <1.1 U | <1.3 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.62 U | <0.60 U | <0.64 U | <0.71 U | <0.69 U | <0.62 U | <0.60 U | <0.64 U | <0.62 U |
| PFHxDA | ng/L | -- | <0.76 U | <0.74 U | <0.78 U | <0.86 U | <0.84 U | <0.75 U | <0.73 U | <0.78 U | <0.75 U |
| PFODA | ng/L | 400,000 | <0.80 U | <0.78 U | <0.83 U | <0.91 U | <0.89 U | <0.80 U | <0.77 U | <0.82 U | <0.79 U |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.37 J** | **0.57 J** | **0.50 J** | **0.70 J** | <0.19 U | **5.1** | **8.5** | **0.59 J** | **0.92 J** |
| PFPeS | ng/L | -- | <0.25 U | <0.25 U | <0.26 U | <0.29 U | <0.28 U | **0.99 J** | **0.53 J** | <0.26 U | **0.32 J** |
| PFHxS | ng/L | 40 | <0.48 U | **1.4 J** | **1.4 J** | <0.55 U | <0.54 U | **5.0** | **3.7** | **1.6 J** | **1.2 J** |
| PFHpS | ng/L | -- | <0.16 U | <0.16 U | <0.17 U | <0.18 U | <0.18 U | **0.29 J** | <0.16 U | <0.17 U | <0.16 U |
| PFOS | ng/L | 20 | <0.46 U | **1.8** | **1.3 J** | <0.52 U | <0.51 U | **9.3** | **11** | **1.2 J** | **2.0** |
| PFNS | ng/L | -- | <0.31 U | <0.31 U | <0.33 U | <0.36 U | <0.35 U | <0.31 U | <0.30 U | <0.32 U | <0.31 U |
| PFDS | ng/L | -- | <0.27 U | <0.26 U | <0.28 U | <0.31 U | <0.30 U | <0.27 U | <0.26 U | <0.28 U | <0.27 U |
| PFDoS | ng/L | -- | <0.82 U | <0.80 U | <0.85 U | <0.94 U | <0.92 U | <0.82 U | <0.79 U | <0.85 U | <0.82 U |
| 4:2 FTSA | ng/L | -- | <0.20 U | <0.20 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U | <0.20 U | <0.21 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.1 U | <2.1 U | <2.2 U | <2.4 U | <2.4 U | <2.1 U | <2.0 U | <2.2 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.39 U | <0.38 U | <0.40 U | <0.45 U | <0.44 U | <0.39 U | <0.38 U | <0.40 U | <0.39 U |
| 10:2 FTSA | ng/L | -- | <0.57 U | <0.55 U | <0.59 U | <0.65 U | <0.63 U | <0.57 U | <0.55 U | <0.59 U | <0.57 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **0.85 J** | **2.0** | **0.94 J** | <0.95 U | **1.8 J** | **3.8** | **3.5** | **4.9** | **3.7** |
| NMeFOSA | ng/L | -- | <0.37 U | <0.36 U | <0.38 U | <0.42 U | <0.41 U | <0.36 U | <0.35 U | <0.38 U | <0.36 U |
| NEtFOSA | ng/L | 20 | <0.74 U | <0.72 U | <0.76 U | <0.84 U | <0.82 U | <0.74 U | <0.71 U | <0.76 U | <0.73 U |
| NMeFOSAA | ng/L | -- | <1.0 U | <0.99 U | <1.1 U | <1.2 U | <1.1 U | <1.0 U | <0.98 U | <1.0 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.1 U | <1.1 U | <1.1 U | <1.3 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.2 U | <1.2 U | <1.2 U | <1.4 U | <1.3 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.72 U | <0.70 U | <0.75 U | <0.82 U | <0.80 U | <0.72 U | <0.70 U | <0.74 U | <0.72 U |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 U | <1.2 U | <1.3 U | <1.5 U | <1.4 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.34 U | <0.33 U | <0.35 U | <0.39 U | <0.38 U | <0.34 U | <0.33 U | <0.35 U | <0.34 U |
| 9Cl-PF3ONS | ng/L | -- | <0.20 U | <0.20 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U | <0.20 U | <0.21 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.27 U | <0.26 U | <0.28 U | <0.31 U | <0.30 U | <0.27 U | <0.26 U | <0.28 U | <0.27 U |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **1.8** | **2.6** | ND | ND | **28.3** | **17.6** | **2.4** | **3.2** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **0.85** | **3.8** | **3.54** | ND | **1.8** | **32.1** | **21.1** | **7.3** | **6.9** |
| **Hazard Index (HI)** | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.0 | 0.2 | 0.2 | 0.0 | 0.1 | 1.7 | 1.1 | 0.4 | 0.4 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

**Table 3**
**Analytical Results for Samples Collected by Wood**
Campbell, Wisconsin

| | | Location | 1215 | 1217 | 1217 | 1218 | 1219 | 1220 |
|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 05/07/21 | 05/05/21 | 05/05/21 | 05/07/21 | 05/07/21 | 05/04/21 |
| | | Sample Number | PUB1215-TN-050721-100 | PUB1217-NN-050121-100 | PUB-FD01-050121 | PUB1218-OTM-050721-100 | PUB1219-NN-050721-100 | PUB1220-NN-050421-100 |
| | | Address | 2323 Lakeshore Dr | 101 Sky Harbour Drive | 101 Sky Harbour Drive | 1700 Lakeshore Drive | 200 Bainbridge Street | 1800 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | |
| **Carboxylic Acids** | | | | | | | | |
| PFBA | ng/L | 10,000 | <2.3 U | **8.1** | **7.6** | **3.1 J** | **8.0** | **2.4 J** |
| PFPeA | ng/L | -- | <0.48 U | **2.9** | **2.9** | **1.7 J** | <0.46 U | **1.1 J** |
| PFHxA | ng/L | 150,000 | <0.56 U | **2.8** | **2.3** | **1.4 J** | <0.55 U | **1.3 J** |
| PFHpA | ng/L | -- | <0.24 U | **1.6 J** | **1.7** | **0.87 J** | <0.24 U | <0.21 U |
| PFOA | ng/L | 20 | <0.83 U | **3.7** | **3.2** | **2.1** | **2.3** | <0.72 U |
| PFNA | ng/L | 30 | <0.26 U | **0.49 J** | **0.43 J** | <0.26 U | <0.26 U | <0.23 U |
| PFDA | ng/L | 300 | <0.30 U | <0.27 U | <0.27 U | <0.30 U | <0.29 U | <0.26 U |
| PFUnA | ng/L | 3,000 | <1.1 U | <0.97 U | <0.95 U | <1.1 U | <1.0 U | <0.94 U |
| PFDoA | ng/L | 500 | <0.54 U | <0.49 U | <0.48 U | <0.53 U | <0.52 U | <0.47 U |
| PFTriA | ng/L | -- | <1.3 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.71 U | <0.64 U | <0.63 U | <0.70 U | <0.69 U | <0.62 U |
| PFHxDA | ng/L | -- | <0.87 U | <0.79 U | <0.77 U | <0.85 U | <0.84 U | <0.76 U |
| PFODA | ng/L | 400,000 | <0.91 U | <0.83 U | <0.82 U | <0.90 U | <0.89 U | <0.80 U |
| **Sulfonic Acids** | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.43 J** | **1.8** | **1.9** | **1.0 J** | **0.99 J** | **3.5** |
| PFPeS | ng/L | -- | <0.29 U | **0.47 J** | **0.54 J** | <0.29 U | **0.54 J** | <0.26 U |
| PFHxS | ng/L | 40 | <0.55 U | **2.0** | **2.2** | **0.71 J** | **1.1 J** | **0.83 J** |
| PFHpS | ng/L | -- | <0.18 U | <0.17 U | <0.16 U | <0.18 U | <0.18 U | <0.16 U |
| PFOS | ng/L | 20 | <0.53 U | **3.2** | **3.4** | **2.8 B** | <0.51 U | <0.46 U |
| PFNS | ng/L | -- | <0.36 U | <0.33 U | <0.32 U | <0.35 U | <0.35 U | <0.31 U |
| PFDS | ng/L | -- | <0.31 U | <0.28 U | <0.28 U | <0.31 U | <0.30 U | <0.27 U |
| PFDoS | ng/L | -- | <0.94 U | <0.86 U | <0.84 U | <0.93 U | <0.92 U | <0.83 U |
| 4:2 FTSA | ng/L | -- | <0.23 U | <0.21 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U |
| 6:2 FTSA | ng/L | -- | <2.4 U | <2.2 U | <2.2 U | <2.4 U | <2.4 U | <2.1 U |
| 8:2 FTSA | ng/L | -- | <0.45 U | <0.41 U | <0.40 U | <0.44 U | <0.43 U | <0.39 U |
| 10:2 FTSA | ng/L | -- | <0.65 U | <0.59 U | <0.58 U | <0.64 U | <0.63 U | <0.57 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | |
| FOSA | ng/L | 20 | **1.4 J** | <0.87 U | <0.85 U | <0.94 U | **1.7 J** | **1.6 J** |
| NMeFOSA | ng/L | -- | <0.42 U | <0.38 U | <0.37 U | <0.41 U | <0.41 U | <0.37 U |
| NEtFOSA | ng/L | 20 | <0.85 U | <0.77 U | <0.75 U | <0.83 U | <0.82 U | <0.74 U |
| NMeFOSAA | ng/L | -- | <1.2 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.0 U |
| NEtFOSAA | ng/L | 20 | <1.3 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSE | ng/L | -- | <1.4 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <0.83 U | <0.75 U | <0.74 U | <0.81 U | <0.80 U | <0.72 U |
| **Replacement Chemicals** | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.5 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U |
| DONA | ng/L | 3,000 | <0.39 U | <0.35 U | <0.35 U | <0.38 U | <0.38 U | <0.34 U |
| 9Cl-PF3ONS | ng/L | -- | <0.23 U | <0.21 U | <0.21 U | <0.23 U | <0.23 U | <0.20 U |
| 11Cl-PF3OUdS | ng/L | -- | <0.31 U | <0.28 U | <0.28 U | <0.31 U | <0.30 U | <0.27 U |
| **Chemical Sum** | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **6.9** | **6.6** | **4.9** | **2.3** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.4** | **6.9** | **6.6** | **4.9** | **4** | **1.6** |
| **Hazard Index (HI)** | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 |

**Notes:**

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 103-0 | 104-0 | 106-0 | 110-1 | 110-2 | 11-1 | 111-0 | 114-01-B | 114-0-A | 115-0 | 116-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/27/20 | 10/27/20 | 11/09/20 | 10/27/20 | 10/27/20 | 04/06/21 | 01/14/21 | 01/18/21 | 01/18/21 | 10/27/20 | 10/29/20 |
| | | | Sample Number | 103-0 | 104-0 | 106-0 | 110-1 | 110-2 | 11-1 | 111-0 | 114-01-B | 114-0-A | 115-0 | 116-0 |
| | | | Address | 2606 Fanta Reed Road | 2608 Fanta Reed Road | 2640 Fanta Reed Road | 2552 Bainbridge Street | 2556 Bainbridge Street | 2723 Marion Street | 2548 Bainbridge Street | 301-309 Odd, 401-409 Odd Callaway Ct | 101 Callaway Court | 2425 Bainbridge Street | 2421 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.5** | **1.0 J** | **17** | **40** | **6.7** | **25 B** | **46** | **3.3 J** | **3.7** | **3.7** | **4.4 B** |
| PFPeA | ng/L | -- | **7.6** | <0.90 U | **42** | **0.92 J** | **6.2** | **3.4 J** | **4.4** | <0.91 U | **2.3 J** | **1.8 J** | **1.1 J** |
| PFHxA | ng/L | 150,000 | **7.3** | <0.90 U | **38** | **1.7 J** | **4.9** | **4.0** | **16** | <0.91 U | **2.2 J** | **2.2 J** | <0.87 U |
| PFHpA | ng/L | -- | **3.6 J** | <0.90 U | **17** | <0.92 U | **2.0 J** | **1.8 J** | **2.8 J** | <0.91 U | **2.9 J** | **1.1 J** | <0.87 U |
| PFOA | ng/L | 20 | **8.1** | <0.90 U | **34** | **3.8** | **3.2 J** | **11** | **16** | <0.91 U | **2.9 J** | **2.7 J** | **2.2 BJ** |
| PFNA | ng/L | 30 | <0.93 U | <0.90 U | **1.9 J** | <0.92 U | <0.90 U | <0.41 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFDA | ng/L | 300 | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.47 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFUnA | ng/L | 3,000 | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.56 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFDoA | ng/L | 500 | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.42 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFTriA | ng/L | -- | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.47 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFTeA | ng/L | 10,000 | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.53 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.72 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.89 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.4 J** | **1.7 J** | **16** | **12** | **5.5** | **6.5** | **21** | **1.4 J** | **1.3 J** | **2.0 J** | **2.1 BJ** |
| PFPeS | ng/L | -- | **2.8 J** | **2.6 J** | **18** | **11** | **4.0** | <0.53 U | **44** | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFHxS | ng/L | 40 | **31** | **31** | **130** | **70** | **64** | **4.5** | **550** | **2.2 J** | **4.5** | **3.2 J** | **2.0 J** |
| PFHpS | ng/L | -- | **2.2 J** | <0.90 U | **9.1** | **2.4 J** | **5.3** | <0.44 U | **24** | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFOS | ng/L | 20 | **140** | **12** | **390** | **39** | **160** | **11** | **420** | <0.91 U | <0.92 U | **3.6 J** | **2.9 BJ** |
| PFNS | ng/L | -- | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.63 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFDS | ng/L | -- | <0.93 U | <0.90 U | <0.89 U | <0.92 U | <0.90 U | <0.69 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| PFDoS | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.93 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.77 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | **1.9 J** | <1.8 U | **48** | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 SU |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.4 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.1 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.93 U | <0.90 U | <0.89 U | **1.3 J** | <0.90 U | <0.54 U | <0.91 U | <0.91 U | <0.92 U | <0.92 U | <0.87 U |
| NMeFOSA | ng/L | -- | <3.7 U | <3.6 U | <3.5 U | <3.7 U | <3.6 U | <1.1 U | <3.6 U | <3.6 U | <3.7 U | <3.7 U | <3.5 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.2 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.83 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.67 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.1 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.84 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | **2.0 BJ** | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.43 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.43 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <0.59 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **148.1** | **12** | **424** | **42.8** | **163.2** | **22** | **436** | ND | **2.9** | **6.3** | **5.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **148.1** | **12** | **424** | **44.1** | **163.2** | **22** | **436** | ND | **2.9** | **6.3** | **5.1** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 8.2 | 1.4 | 24.5 | 4.0 | 9.8 | 1.2 | 35.6 | 0.1 | 0.3 | 0.4 | 0.3 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:
https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0
to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 1182-0 | 1223-0 | 13-1-A | 13-1-B | 135-0 | 1365-0 | 142-0 | 1422-3549 | 1425-0 | 1433-0 | 1434-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/31/21 | 03/04/21 | 03/02/21 | 03/02/21 | 01/21/21 | 01/21/21 | 03/01/21 | 03/23/21 | 03/08/21 | 03/01/21 | 03/25/21 |
| | | | Sample Number | 1182-0 | 1223-0 | 13-1-A | 13-1-B | 135-0 | 1365-0 | 142-0 | 1422-3549 | 1425-0 | 1433-0 | 1434-1 |
| | | | Address | 1819 Nakomis Avenue | 1905 Cherokee Avenue | 615 Plainview Road | 615 Plainview Road | 2312 Bainbridge Street | 137 Usher Street | 2226 Bainbridge Street | 3549 Lakeshore Drive | 3545 Lakeshore Drive | 3521 Lakeshore Drive | 3515 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | <0.89 U | <0.92 U | **61** | **75** | **5.2** | **11** | **3.9** | **43** | **59** | **160** | **35** |
| PFPeA | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | **1.9 J** | **0.91 J** | **2.1 J** | **3.3 J** | **7.9** |
| PFHxA | ng/L | 150,000 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | **2.4 J** | <0.91 U | **1.3 J** | **4.3** | **6.6** |
| PFHpA | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | **2.1 J** | <0.91 U | <0.87 U | **2.3 J** | **3.5 J** |
| PFOA | ng/L | 20 | <0.89 U | <0.92 U | **22** | **26** | **1.2 J** | <0.88 U | **6.6** | **5.9 B** | **12** | **42** | **7.6 B** |
| PFNA | ng/L | 30 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFDA | ng/L | 300 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFUnA | ng/L | 3,000 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFDoA | ng/L | 500 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFTriA | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFTeA | ng/L | 10,000 | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | <0.89 U | <0.92 U | **11** | **11** | **2.9 J** | **3.5** | **3.6** | **1.4 J** | **9.8** | **8.4** | **17** |
| PFPeS | ng/L | -- | <0.89 U | <0.92 U | **0.98 J** | **1.1 J** | **1.4 J** | **0.88 J** | <0.89 U | <0.91 U | **1.3 J** | **2.7 J** | <0.97 U |
| PFHxS | ng/L | 40 | <0.89 U | <0.92 U | **4.8** | **5.0** | **3.7 J** | **2.0 J** | **4.1** | **1.6 J** | **2.4 J** | **8.1** | **13** |
| PFHpS | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFOS | ng/L | 20 | <0.89 U | **1.3 J** | **26** | **28** | **2.4 J** | **4.4** | **3.0 J** | **2.5 BJ** | **8.1** | **20** | **4.1 B** |
| PFNS | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFDS | ng/L | -- | <0.89 U | <0.92 U | <0.85 U | <0.92 U | <0.99 U | <0.88 U | <0.89 U | <0.91 U | <0.87 U | <0.89 U | <0.97 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 LU | <1.7 U | <1.8 U | <1.9 LU |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.1 J** | <0.92 U | <0.85 U | **0.92 J** | <0.99 U | **2.3 J** | **1.8 J** | <0.91 U | **1.9 J** | **1.2 J** | <0.97 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.7 U | <3.4 U | <3.7 U | <4.0 U | <3.5 U | <3.6 U | <3.6 U | <3.5 U | <3.6 U | <3.9 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **1.3** | **48** | **54** | **3.6** | **4.4** | **9.6** | **8.4** | **20.1** | **62** | **11.7** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.1** | **1.3** | **48** | **54.92** | **3.6** | **6.7** | **11.4** | **8.4** | **22** | **63.2** | **11.7** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.1 | 2.5 | 2.9 | 0.3 | 0.4 | 0.7 | 0.5 | 1.2 | 3.4 | 0.9 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Location | 1435-0 | 1437-0 | 1438-0 | 144-0 | 144-1 | 147-3 | 150-0 | 151-3-0 | 151-3-A | 151-3-E | 151-5 |
| | | Sample Date | 03/02/21 | 03/03/21 | 01/31/21 | 01/26/21 | 01/26/21 | 11/12/20 | 06/22/21 | 01/18/21 | 01/18/21 | 01/18/21 | 03/03/21 |
| | | Sample Number | 1435-0 | 1437-0 | 1438-0 | 144-0 | 144-1 | 147-3 | 150-0 | 151-3-0 | 151-3-A | 151-3-E | 151-5 |
| | | Address | 3511 Lakeshore Drive | 609 Dakota Street | 3507 Lakeshore Drive | 2306 Bainbridge Street | 2304 Bainbridge Street | 102 Mitchell Street | 2222 Bainbridge Street | ainbridge St-301-507Campbel | 2218 Bainbridge Street | inbridge St-302-408Campbell | 2100 Dawson Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **140** | **150** | **91** | **3.6 J** | **7.2** | **7.9** | **2.7 J** | **5.5** | **2.0 J** | **2.3 J** | **5.1** |
| PFPeA | ng/L | -- | **18** | **7.1** | **3.7 J** | <0.92 U | **3.8** | **1.6 J** | <0.48 U | **1.4 J** | <0.97 U | <1.0 U | <0.88 U |
| PFHxA | ng/L | 150,000 | **16** | **4.4** | **3.2 J** | <0.92 U | **2.7 J** | **1.6 J** | <0.61 U | **1.2 J** | <0.97 U | <1.0 U | <0.88 U |
| PFHpA | ng/L | -- | **2.4 J** | <0.88 U | <1.0 U | <0.92 U | **1.1 J** | <0.91 U | <0.40 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFOA | ng/L | 20 | **110** | **92** | **25** | **1.8 J** | **3.6** | <0.91 U | <0.74 U | **1.4 J** | <0.97 U | <1.0 U | **1.3 J** |
| PFNA | ng/L | 30 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.41 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFDA | ng/L | 300 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.47 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFUnA | ng/L | 3,000 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.56 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFDoA | ng/L | 500 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.42 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFTriA | ng/L | -- | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.47 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFTeA | ng/L | 10,000 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.53 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.73 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.89 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **10** | **15** | **4.3** | **1.7 J** | **9.9** | **1.7 J** | **2.5 J** | <0.98 U | **1.4 J** | <1.0 U | **1.1 J** |
| PFPeS | ng/L | -- | **2.2 J** | **2.6 J** | **2.3 J** | <0.92 U | <0.91 U | <0.91 U | | <0.98 U | <0.97 U | <1.0 U | **0.93 J** |
| PFHxS | ng/L | 40 | **5.7** | **6.7** | **5.0** | **1.9 J** | **2.9 J** | **2.0 J** | **2.1 J** | **1.4 J** | **1.3 J** | <1.0 U | **2.0 J** |
| PFHpS | ng/L | -- | <0.89 U | **0.89 J** | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.44 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFOS | ng/L | 20 | **24** | **31** | **15** | <0.92 U | **8.5** | **3.1 J** | <1.8 U | **1.1 J** | <0.97 U | <1.0 U | **2.1 J** |
| PFNS | ng/L | -- | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.63 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFDS | ng/L | -- | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.69 U | <0.98 U | <0.97 U | <1.0 U | <0.88 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.93 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.78 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.4 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.1 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.89 U | <0.88 U | <1.0 U | <0.92 U | <0.91 U | <0.91 U | <0.55 U | <0.98 U | **0.97 J** | **1.6 J** | **1.8 J** |
| NMeFOSA | ng/L | -- | <3.5 U | <3.5 U | <4.0 U | <3.7 U | <3.6 U | <3.6 U | <1.1 U | <3.9 U | <3.9 U | <4.1 U | <3.5 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.2 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.83 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.67 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.1 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.85 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.43 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.43 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U | <0.59 U | <2.0 U | <1.9 U | <2.1 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **134** | **123** | **40** | **1.8** | **12.1** | **3.1** | ND | **2.5** | ND | ND | **3.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **134** | **123** | **40** | **1.8** | **12.1** | **3.1** | ND | **2.5** | **0.97** | **1.6** | **5.2** |
| **Hazard Index (HI)** | | | | | | | | | | | | | |
| HI | ng/L | 20 | 6.9 | 6.3 | 2.1 | 0.1 | 0.7 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 1531 | 1556-2 | 1556-2 | 1573-1 | 1580-1 | 1583-1 | 1588-0 | 1631-0 | 1637-0 | 1640-0 | 1660-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/01/21 | 02/17/21 | 03/25/21 | 04/14/21 | 03/08/21 | 03/11/21 | 04/26/21 | 03/11/21 | 03/18/21 | 03/08/21 | 03/16/21 |
| | | | Sample Number | 1531 | 1556-2 | 1556-2 POST FILTER | 1573-1 | 1580-1 (was 1586-0) | 1583-1 | 1588-0 | 1631-0 | 1637-0 | 1640-0 | 1660-1 |
| | | | Address | 2905 Bayshore Drive | 905 Plainview Road W | 905 Plainview Road W | 2805 Lakeshore Drive | 817 Plainview Rd | 2823 Bayshore Drive | 2815 Bayshore Drive | 810 Hanson Road | 901 Kime Street | 914 Hanson Road | 3151 Edgewater Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **79** | **6.1** | <0.88 U | **18** | **13** | **23** | **11** | **9.2** | **2.4 J** | **2.5 J** | **2.1 J** |
| PFPeA | ng/L | -- | <0.97 U | **4.1** | <0.88 U | <0.54 U | **2.6 J** | **1.2 J** | <0.48 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFHxA | ng/L | 150,000 | <0.97 U | **6.0** | <0.88 U | <0.68 U | **2.0 J** | <0.87 U | <0.61 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFHpA | ng/L | -- | <0.97 U | **2.2 J** | <0.88 U | <0.44 U | **1.5 J** | <0.87 U | <0.40 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFOA | ng/L | 20 | **8.3** | **6.6** | **17** | **2.4 J** | **5.7** | **1.4 J** | **1.2 J** | **1.3 J** | <0.92 U | <0.88 U | <0.85 U |
| PFNA | ng/L | 30 | <0.97 U | <0.97 U | <0.88 U | **0.54 J** | <0.88 U | <0.87 U | <0.41 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFDA | ng/L | 300 | <0.97 U | <0.97 U | <0.88 U | <0.52 U | <0.88 U | <0.87 U | <0.47 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFUnA | ng/L | 3,000 | <0.97 U | <0.97 U | <0.88 U | <0.62 U | <0.88 U | <0.87 U | <0.56 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFDoA | ng/L | 500 | <0.97 U | <0.97 U | <0.88 U | <0.47 U | <0.88 U | <0.87 U | <0.42 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFTriA | ng/L | -- | <0.97 U | <0.97 U | <0.88 U | <0.52 U | <0.88 U | <0.87 U | <0.47 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFTeA | ng/L | 10,000 | <0.97 U | <0.97 U | <0.88 U | <0.59 U | <0.88 U | <0.87 U | <0.53 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <0.81 U | <1.8 U | <1.7 U | <0.73 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.9 U | <1.8 U | <0.99 U | <1.8 U | <1.7 U | <0.89 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **9.9** | **19** | <0.88 U | **8.8** | **13** | **3.0 J** | **1.2 J** | **1.4 J** | **1.3 J** | **2.0 J** | **1.7 J** |
| PFPeS | ng/L | -- | **3.0 J** | **1.1 J** | <0.88 U | **0.76 J** | <0.88 U | <0.87 U | <0.53 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFHxS | ng/L | 40 | **5.0** | **5.9** | <0.88 U | **6.1** | **2.8 J** | **2.9 J** | <0.49 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFHpS | ng/L | -- | <0.97 U | <0.97 U | <0.88 U | <0.49 U | <0.88 U | <0.87 U | <0.44 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFOS | ng/L | 20 | **3.2 J** | **54 S** | <0.88 U | **11** | **44** | **3.3 J** | **2.0 J** | **2.5 J** | **2.9 J** | **2.7 J** | **2.4 J** |
| PFNS | ng/L | -- | <0.97 U | <0.97 U | <0.88 U | <0.70 U | <0.88 U | <0.87 U | <0.63 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFDS | ng/L | -- | <0.97 U | <0.97 U | <0.88 U | <0.77 U | <0.88 U | <0.87 U | <0.69 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| PFDoS | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <1.0 U | <1.8 U | <1.7 U | <0.93 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <0.86 U | <1.8 U | <1.7 U | <0.78 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | **110 S** | <1.8 U | <2.0 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <1.6 U | <1.8 U | <1.7 U | <1.4 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <1.2 U | <1.8 U | <1.7 U | <1.1 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.97 U | <0.97 U | <0.88 U | <0.61 U | **1.1 J** | <0.87 U | <0.55 U | <0.92 U | <0.92 U | <0.88 U | <0.85 U |
| NMeFOSA | ng/L | -- | <3.9 U | <3.9 U | <3.5 U | <1.2 U | <3.5 U | <3.5 U | <1.1 U | <3.7 U | <3.7 U | <3.5 U | <3.4 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.9 U | <1.8 U | <1.3 U | <1.8 U | <1.7 U | <1.2 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <0.92 U | <1.8 U | <1.7 U | <0.83 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.9 U | <1.8 U | <0.74 U | <1.8 U | <1.7 U | <0.67 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <1.3 U | <1.8 U | <1.7 U | <1.1 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.9 U | <1.8 U | <0.94 U | <1.8 U | <1.7 U | <0.85 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <1.9 U | <1.8 U | <2.1 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.9 U | <1.8 U | <0.48 U | <1.8 U | <1.7 U | <0.43 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <0.48 U | <1.8 U | <1.7 U | <0.43 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.9 U | <1.8 U | <0.66 U | <1.8 U | <1.7 U | <0.59 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **11.5** | **60.6** | **17** | **13.4** | **49.7** | **4.7** | **3.2** | **3.8** | **2.9** | **2.7** | **2.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **11.5** | **60.6** | **17** | **13.4** | **50.8** | **4.7** | **3.2** | **3.8** | **2.9** | **2.7** | **2.4** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.7 | 3.2 | 0.9 | 0.8 | 2.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 1694-0 | 1704-0 | 17-10267-080 | 1733-1 | 1744-0 | 1764-0 | 178-0 | 1788-0 | 179-0 | 179-0 | 1808-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 01/18/21 | 02/03/21 | 12/23/20 | 03/04/21 | 04/06/21 | 03/17/21 | 11/19/20 | 03/11/21 | 10/27/20 | 10/27/20 | 03/10/21 |
| | | | Sample Number | 1694-0 | 1704-0 | 17-10267-80 | 1733-1 | 1744-0 | 1764-0 | 178-0 | 1788-0 | 179-0 PRE-FILTER | 179-0 POST-FILTER | 1808-0 |
| | | | Address | 3065 Edgewater Lane | 3049 Edgewater Lane | 2604 Fanta Reed Road | 3102 Edgewater Drive | 2916 Youngdale Ave | 2922 Pierce Avenue | 2560 2Nd Avenue E | 2907 Pierce Avenue | 2556 2Nd Avenue E | 2556 2Nd Avenue E | 3147 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **17** | **9.4** | **6.6** | **5.0** | **12 B** | **11** | **150** | **17** | **130** | **23** | **14** |
| PFPeA | ng/L | -- | <0.90 U | **1.3 J** | **4.0** | <0.87 U | <0.49 U | <0.93 U | **7.8** | <0.95 U | **8.0** | <0.98 U | <0.90 U |
| PFHxA | ng/L | 150,000 | <0.90 U | **1.2 J** | **3.5 J** | <0.87 U | <0.61 U | <0.93 U | **1.9 J** | <0.95 U | **2.1 J** | <0.98 U | <0.90 U |
| PFHpA | ng/L | -- | <0.90 U | **1.0 J** | **2.8 J** | <0.87 U | <0.40 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFOA | ng/L | 20 | **2.5 J** | **4.3** | **6.4** | <0.87 U | <0.74 U | <0.93 U | **19** | <0.95 U | **22** | <0.98 U | **1.4 J** |
| PFNA | ng/L | 30 | <0.90 U | <0.88 U | **1.9 J** | <0.87 U | **0.63 J** | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFDA | ng/L | 300 | <0.90 U | **0.95 J** | <0.89 U | <0.87 U | <0.47 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.56 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.42 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFTriA | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.47 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.54 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.73 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.89 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **7.5** | **1.5 J** | **1.9 J** | **1.2 J** | **5.7** | **3.1 J** | **4.8** | **3.6 J** | **5.2** | <0.98 U | **4.5** |
| PFPeS | ng/L | -- | <0.90 U | <0.88 U | **3.0 J** | <0.87 U | <0.53 U | <0.93 U | **3.8** | <0.95 U | **3.7** | <0.98 U | <0.90 U |
| PFHxS | ng/L | 40 | **2.1 J** | <0.88 U | **31** | <0.87 U | **2.0 J** | **8.6** | **7.9** | **1.2 J** | **7.3** | <0.98 U | **2.0 J** |
| PFHpS | ng/L | -- | <0.90 U | <0.88 U | **2.6 J** | <0.87 U | <0.45 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFOS | ng/L | 20 | **11** | **5.4** | **150** | <0.87 U | **11** | **12** | **6.5** | <0.95 U | **7.5** | <0.98 U | **8.2** |
| PFNS | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.64 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFDS | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.87 U | <0.69 U | <0.93 U | <0.90 U | <0.95 U | <0.94 U | <0.98 U | <0.90 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.93 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.78 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | **17** | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.4 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.1 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.1 J** | <0.88 U | <0.89 U | <0.87 U | **0.92 J** | <0.93 U | <0.90 U | **1.0 J** | <0.94 U | <0.98 U | **1.1 J** |
| NMeFOSA | ng/L | -- | <3.6 U | <3.5 U | <3.6 U | <3.5 U | <1.1 U | <3.7 U | <3.6 U | <3.8 U | <3.7 U | <3.9 U | <3.6 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.2 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.83 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.67 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.1 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.85 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.9 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.43 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.43 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.59 U | <1.9 U | <1.8 U | <1.9 U | <1.9 U | <2.0 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **13.5** | **9.7** | **156.4** | ND | **11** | **12** | **25.5** | ND | **29.5** | ND | **9.6** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **14.6** | **9.7** | **156.4** | ND | **11.92** | **12** | **25.5** | **1** | **29.5** | ND | **10.7** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.8 | 0.5 | 8.7 | 0.0 | 0.7 | 0.8 | 1.5 | 0.1 | 1.7 | 0.0 | 0.6 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 181-0 | 182-0 | 1822-0 | 184-0 | 1841-0 | 185-0 | 186-0 | 1863-0 | 188-0 | 189-0 | 1891-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 11/02/20 | 01/13/21 | 03/31/21 | 11/02/20 | 03/23/21 | 10/29/20 | 10/29/20 | 03/04/21 | 11/05/20 | 12/02/20 | 04/14/21 |
| | | | Sample Number | 181-0 | 182-0 | 1822-0 | 184-0 | 1841-0 | 185-0 | 186-0 | 1863-0 | 188-0 | 189-0 | 1891-0 |
| | | | Address | 2548 2Nd Avenue E | 2544 2Nd Avenue E | 3106 Youngdale Avenue | 2532 2Nd Avenue E | 3034 Youngdale Avenue | 2530 2Nd Avenue E | 2524 2Nd Avenue E | 3129 Youngdale Avenue | 2512 2Nd Avenue E | 2508 2Nd Avenue E | 906 Lakeview Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **95** | **5.8** | **16** | **30** | **12** | **19** | **79** | **10** | **11** | **15** | **8.0** |
| PFPeA | ng/L | -- | **3.2 J** | **2.6 J** | <1.0 U | **2.7 J** | **2.8 J** | **1.8 J** | **1.8 J** | <0.96 U | **6.5** | **12** | <0.48 U |
| PFHxA | ng/L | 150,000 | **1.8 J** | **2.7 J** | <1.0 U | **3.8** | **2.1 J** | **2.5 J** | **1.9 J** | <0.96 U | **6.4** | **51** | <0.61 U |
| PFHpA | ng/L | -- | **1.2 J** | **1.8 J** | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | **2.4 J** | **15** | <0.40 U |
| PFOA | ng/L | 20 | <0.90 U | **5.2** | **2.1 J** | <0.88 U | **6.5** | <0.93 U | **5.2** | <0.96 U | **7.9** | **38** | <0.74 U |
| PFNA | ng/L | 30 | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.41 U |
| PFDA | ng/L | 300 | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.47 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.56 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.42 U |
| PFTriA | ng/L | -- | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.47 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.53 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.72 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.89 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.3** | **5.2** | **5.0** | **9.1** | **2.9 J** | **7.7** | **15** | **2.5 J** | **100** | **120** | **1.1 J** |
| PFPeS | ng/L | -- | **3.3 J** | <0.96 U | <1.0 U | **8.0** | <1.0 U | **6.6** | **11** | <0.96 U | **22** | **190** | <0.53 U |
| PFHxS | ng/L | 40 | **6.6** | **3.0 J** | **1.3 J** | **70** | **10** | **77** | **37** | **0.96 J** | **28** | **900** | **0.86 J** |
| PFHpS | ng/L | -- | <0.90 U | <0.96 U | <1.0 U | **1.7 J** | <1.0 U | <0.93 U | **1.5 J** | <0.96 U | <0.85 U | **9.5** | <0.44 U |
| PFOS | ng/L | 20 | **4.5** | **18** | **8.0** | **4.5** | **9.1** | **4.8** | **22** | **5.9** | **12** | **23** | **6.6** |
| PFNS | ng/L | -- | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.63 U |
| PFDS | ng/L | -- | <0.90 U | <0.96 U | <1.0 U | <0.88 U | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | <0.69 U |
| PFDoS | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.93 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.77 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.4 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.1 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.90 U | <0.96 U | <1.0 U | **0.91 J** | <1.0 U | <0.93 U | <0.88 U | <0.96 U | <0.85 U | <1.0 U | **1.1 J** |
| NMeFOSA | ng/L | -- | <3.6 U | <3.8 U | <4.1 U | <3.5 U | <4.1 U | <3.7 U | <3.5 U | <3.8 U | <3.4 U | <4.1 U | <1.1 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.2 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.83 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.67 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.1 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.84 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.43 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.43 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.9 U | <2.1 U | <1.8 U | <2.1 U | <1.9 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <0.59 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **4.5** | **23.2** | **10.1** | **4.5** | **15.6** | **4.8** | **27.2** | **5.9** | **19.9** | **61** | **6.6** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **4.5** | **23.2** | **10.1** | **5.41** | **15.6** | **4.8** | **27.2** | **5.9** | **19.9** | **61** | **7.7** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.4 | 1.2 | 0.5 | 2.0 | 1.0 | 2.2 | 2.3 | 0.3 | 1.7 | 25.6 | 0.4 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Location | 1895-0 | 1907-0 | 1910-0 | 1913-10 | 1913-16 | 1913-9 | 1916-1 | 192-0 | 1924-11 | 1924-2 | 1924-3 |
| | | Sample Date | 03/31/21 | 03/31/21 | 03/23/21 | 03/10/21 | 01/18/21 | 03/11/21 | 04/08/21 | 10/27/20 | 03/08/21 | 03/09/21 | 03/11/21 |
| | | Sample Number | 1895-0 | 1907-0 | 1910-0 | 1913-10 | 1913-16 | 1913-9 | 1916-1 | 192-0 | 1924-11 | 1924-2 | 1924-3 |
| | | Address | 814 Lakeview Drive | 801 Spillway Drive | 813 Spillway Drive | 2629 Lakeshore Drive | 2623 Lakeshore Drive | 2623 Bayview Court | 2625 Bayview Court | 202 Fanta Reed Road | 2405 Lakeshore Drive | 2535 Baumgartner Drive | 2533 Baumgartner Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **19** | **20** | **14** | **16** | **22** | **6.4** | **5.5 B** | **83** | **27** | **13** | **14** |
| PFPeA | ng/L | -- | **1.2 J** | **4.1** | <0.92 U | <0.90 U | **2.9 J** | <0.96 U | <0.50 U | <0.91 U | <0.92 U | **1.8 J** | **2.5 J** |
| PFHxA | ng/L | 150,000 | <0.86 U | **3.3 J** | <0.92 U | **1.9 J** | **3.6 J** | <0.96 U | <0.63 U | <0.91 U | <0.92 U | **1.5 J** | **2.1 J** |
| PFHpA | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.41 U | <0.91 U | <0.92 U | <0.92 U | **1.1 J** |
| PFOA | ng/L | 20 | **3.2 J** | <0.93 U | **2.3 BJ** | **4.4** | **10** | <0.96 U | <0.76 U | **10** | **5.8** | **5.0** | **6.5** |
| PFNA | ng/L | 30 | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.42 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFDA | ng/L | 300 | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.48 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFUnA | ng/L | 3,000 | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.58 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFDoA | ng/L | 500 | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.43 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFTriA | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.49 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFTeA | ng/L | 10,000 | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.55 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFHxDA | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.75 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.92 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **7.5** | **6.4** | **4.0** | **8.9** | **5.3** | **6.0** | **2.8 J** | **6.0** | **3.3 J** | **9.9** | **10** |
| PFPeS | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | **0.92 J** | **0.95 J** | <0.96 U | <0.55 U | **3.9** | <0.92 U | <0.92 U | **1.2 J** |
| PFHxS | ng/L | 40 | **1.4 J** | **1.8 J** | **1.8 J** | **2.5 J** | **2.5 J** | **2.6 J** | **0.56 J** | **7.4** | **2.8 J** | **3.4 J** | **3.4 J** |
| PFHpS | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.46 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFOS | ng/L | 20 | **9.4** | **4.9** | **8.5 B** | **6.9** | **8.1** | **3.3 J** | **2.7 J** | **7.7** | **2.7 J** | **13** | **9.5** |
| PFNS | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.65 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFDS | ng/L | -- | <0.86 U | <0.93 U | <0.92 U | <0.90 U | <0.92 U | <0.96 U | <0.71 U | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| PFDoS | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.96 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.80 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.7 U | <1.9 U | <1.8 LU | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | **7.7** | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.5 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.1 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **0.93 J** | <0.93 U | <0.92 U | <0.90 U | **1.1 J** | <0.96 U | **0.69 J** | <0.91 U | <0.92 U | <0.92 U | <0.93 U |
| NMeFOSA | ng/L | -- | <3.4 U | <3.7 U | <3.7 U | <3.6 U | <3.7 U | <3.8 U | <1.2 U | <3.6 U | <3.7 U | <3.7 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.2 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.86 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.69 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.2 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.88 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.44 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.44 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.7 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <0.61 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **12.6** | **4.9** | **10.8** | **11.3** | **18.1** | **3.3** | **2.7** | **17.7** | **8.5** | **18** | **16** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **13.53** | **4.9** | **10.8** | **11.3** | **19.2** | **3.3** | **3.39** | **17.7** | **8.5** | **18** | **16** |
| **Hazard Index (HI)** | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.7 | 0.3 | 0.6 | 0.6 | 1.0 | 0.2 | 0.2 | 1.1 | 0.5 | 1.0 | 0.9 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 1924-5 | 193-0 | 194-0 | 195-0 | 197-0 | 200-0 | 2007-0 | 202-0 | 2027 | 203-0 | 204-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/11/21 | 10/27/20 | 11/02/20 | 11/05/20 | 12/17/20 | 12/08/20 | 03/31/21 | 11/02/20 | 02/24/21 | 12/17/20 | 11/09/20 |
| | | | Sample Number | 1924-5 | 193-0 | 194-0 | 195-0 | 197-0 | 200-0 | 2007-0 | 202-0 | 2027 | 203-0 | 204-0 |
| | | | Address | 2531 Baumgartner Drive | 2560 1St Avenue E | 2556 1St Avenue E | 2548 1St Avenue E | 2544 1St Avenue E | 2532 1St Avenue E | 805 Breezy Point Road | 2524 1St Avenue E | 3029 Youngdale Avenue | 2520 1St Avenue E | 2516 1St Avenue E |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **30** | **73** | **73** | **30** | **28** | **20** | **20** | **18** | **14** | **7.6** | **130** |
| PFPeA | ng/L | -- | **3.5** | <0.88 U | <0.90 U | <0.87 U | **3.1 J** | **6.6** | <0.90 U | **13** | <0.98 U | **1.1 J** | **0.93 J** |
| PFHxA | ng/L | 150,000 | **3.4 J** | <0.88 U | <0.90 U | <0.87 U | **1.7 J** | **35** | <0.90 U | **51** | <0.98 U | **2.5 J** | **2.6 J** |
| PFHpA | ng/L | -- | **0.89 J** | <0.88 U | <0.90 U | <0.87 U | <0.91 U | **6.1** | <0.90 U | **9.7** | <0.98 U | <0.93 U | <0.93 U |
| PFOA | ng/L | 20 | **9.9** | **1.8 J** | <0.90 U | **1.8 J** | **3.5 J** | **51** | **2.8 J** | **68** | **2.9 BJ** | <0.93 U | <0.93 U |
| PFNA | ng/L | 30 | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFDA | ng/L | 300 | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFUnA | ng/L | 3,000 | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFDoA | ng/L | 500 | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFTriA | ng/L | -- | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFTeA | ng/L | 10,000 | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **14** | **6.9** | **8.4** | **11** | **8.6** | **42** | **5.1** | **130** | **3.7 J** | **6.5** | **11** |
| PFPeS | ng/L | -- | **1.0 J** | **4.5** | **6.4** | **7.8** | **6.7** | **110** | <0.90 U | **220** | <0.98 U | **4.4** | **11** |
| PFHxS | ng/L | 40 | **3.2 J** | **9.7** | **12** | **15** | **39** | **1200** | **2.4 J** | **1700** | **1.6 J** | **12** | **21** |
| PFHpS | ng/L | -- | <0.88 U | <0.88 U | <0.90 U | <0.87 U | **1.0 J** | **38** | <0.90 U | **64** | <0.98 U | <0.93 U | <0.93 U |
| PFOS | ng/L | 20 | **11** | **8.2** | **8.3** | **8.4** | **84** | **230** | **11** | **680** | **12** | <0.93 U | **10** |
| PFNS | ng/L | -- | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFDS | ng/L | -- | <0.88 U | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | <0.90 U | <0.89 U | <0.98 U | <0.93 U | <0.93 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.3 J** | <0.88 U | <0.90 U | <0.87 U | <0.91 U | <0.89 U | **1.5 J** | <0.89 U | **1.1 J** | <0.93 U | <0.93 U |
| NMeFOSA | ng/L | -- | <3.5 U | <3.5 U | <3.6 U | <3.5 U | <3.6 U | <3.6 U | <3.6 U | <3.5 U | <3.9 U | <3.7 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <2.0 U | <1.9 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **20.9** | **10** | **8.3** | **10.2** | **87.5** | **281** | **13.8** | **748** | **14.9** | ND | **10** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **22.2** | **10** | **8.3** | **10.2** | **87.5** | **281** | **15.3** | **748** | **16** | ND | **10** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 1.2 | 0.7 | 0.7 | 0.9 | 5.4 | 44.1 | 0.8 | 79.9 | 0.8 | 0.3 | 1.0 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 205-0 | 2055-0 | 2057-0 | 206-0 | 2068-0 | 207-0 | 2077-0 | 2084-0 | 2085-0 | 2087-0 | 209-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/27/20 | 03/02/21 | 03/02/21 | 11/12/20 | 03/17/21 | 10/27/20 | 03/18/21 | 02/22/21 | 03/25/21 | 03/16/21 | 11/02/20 |
| | | | Sample Number | 205-0 | 2055-0 | 2057-0 | 206-0 | 2068-0 | 207-0 | 2077-0 | 2084-0 | 2085-0 | 2087-0 | 209-0 |
| | | | Address | 2512 1St Avenue E | 503 Church Drive | 701 Fanta Reed Road | 2508 1St Avenue E | 2604 Jerald Street | 2504 1St Avenue E | 2610 Thomas Street | 2603 Thomas Street | 2605 Thomas Street | 2609 Thomas Street | 2500 1St Avenue E |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **5.9** | **3.6** | **54** | **16 J** | **14** | **9.7** | **19** | **13** | **8.7** | **12** | **1.9 J** |
| PFPeA | ng/L | -- | **1.0 J** | <0.87 U | **3.3 J** | **13 J** | **1.3 J** | <0.88 U | **1.9 J** | **2.5 J** | <0.94 U | **1.1 J** | <0.85 U |
| PFHxA | ng/L | 150,000 | **1.0 J** | <0.87 U | **3.1 J** | **51** | **0.96 J** | <0.88 U | **1.4 J** | **2.7 J** | <0.94 U | <0.90 U | <0.85 U |
| PFHpA | ng/L | -- | <0.95 U | <0.87 U | <0.89 U | **15 J** | <0.90 U | <0.88 U | <0.90 U | **1.6 J** | <0.94 U | <0.90 U | <0.85 U |
| PFOA | ng/L | 20 | <0.95 U | <0.87 U | **40** | **49** | **4.5** | **2.6 J** | **2.1 J** | **7.4** | **1.6 J** | **5.1** | <0.85 U |
| PFNA | ng/L | 30 | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFDA | ng/L | 300 | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFUnA | ng/L | 3,000 | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFDoA | ng/L | 500 | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFTriA | ng/L | -- | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFTeA | ng/L | 10,000 | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **6.4** | **3.0 J** | **6.7** | **110** | **3.3 J** | **4.5** | **6.0** | **10** | **5.1** | **5.1** | **4.3** |
| PFPeS | ng/L | -- | **4.0** | **1.4 J** | <0.89 U | **180** | <0.90 U | **2.3 J** | **1.0 J** | **1.4 J** | <0.94 U | <0.90 U | **3.2 J** |
| PFHxS | ng/L | 40 | **8.6** | **2.2 J** | **10** | **910** | <0.90 U | **6.8** | **1.9 J** | **4.2** | **2.3 J** | **2.0 J** | **4.5** |
| PFHpS | ng/L | -- | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFOS | ng/L | 20 | **4.5** | **1.9 J** | **16** | **19** | **3.6** | **5.1** | **3.0 J** | **18** | **9.2** | **17** | **3.0 J** |
| PFNS | ng/L | -- | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | <0.90 U | <0.85 U |
| PFDS | ng/L | -- | <0.95 U | <0.87 U | <0.89 U | <4.5 U | <0.90 U | <0.88 U | <0.90 U | <0.90 U | <0.94 U | **1.2 J** | <0.85 U |
| PFDoS | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.95 U | **0.87 J** | <0.89 U | <4.5 U | **1.1 J** | **2.2 J** | **1.0 J** | <0.90 U | **1.3 J** | **2.3 J** | <0.85 U |
| NMeFOSA | ng/L | -- | <3.8 U | <3.5 U | <3.6 U | <18 U | <3.6 U | <3.5 U | <3.6 U | <3.6 U | <3.7 U | <3.6 U | <3.4 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.7 U | <1.8 U | <9.0 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **4.5** | **1.9** | **56** | **68** | **8.1** | **7.7** | **5.1** | **25.4** | **10.8** | **22.1** | **3** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **4.5** | **2.77** | **56** | **68** | **9.2** | **9.9** | **6.1** | **25.4** | **12.1** | **24.4** | **3** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.4 | 0.2 | 3.1 | 26.2 | 0.5 | 0.7 | 0.4 | 1.4 | 0.7 | 1.3 | 0.3 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 2090-0 | 2094-0 | 2095-0 | 2096-0 | 210-0 | 2100-0 | 2101-0 | 2104-0 | 2106-0 | 211-0 | 212-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/16/21 | 03/16/21 | 03/08/21 | 03/16/21 | 11/03/20 | 03/02/21 | 03/10/21 | 03/16/21 | 03/18/21 | 11/05/20 | 11/18/20 |
| | | | Sample Number | 2090-0 | 2094-0 | 2095-0 | 2096-0 | 210-0 | 2100-0 | 2101-0 | 2104-0 | 2106-0 | 211-0 | 212-0 |
| | | | Address | 2610 Baumgartner Drive | 2602 Baumgartner Drive | 2613 Baumgartner Drive | 2611 Baumgartner Drive | 2501 2Nd Avenue E | 2603 Baumgartner Drive | 2601 Baumgartner Drive | 802 Fanta Reed Road | 806 Fanta Reed Road | 2505 2Nd Avenue E | 2509 2Nd Avenue E |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **11** | **12** | **16** | **23** | **3.3 J** | **13** | **13** | **17** | **19** | **4.8** | **6.3** |
| PFPeA | ng/L | -- | **3.4 J** | **3.3 J** | <0.91 U | **1.4 J** | **1.0 J** | **1.8 J** | **1.3 J** | <0.95 U | **1.7 J** | **1.9 J** | **1.6 J** |
| PFHxA | ng/L | 150,000 | **2.4 J** | **2.4 J** | <0.91 U | **1.5 J** | **1.1 J** | **1.7 J** | <0.90 U | <0.95 U | **1.2 J** | **2.0 J** | **1.7 J** |
| PFHpA | ng/L | -- | **1.3 J** | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | **1.2 J** | **1.2 J** |
| PFOA | ng/L | 20 | **6.7** | **6.1** | <0.91 U | **4.2** | **1.4 J** | **3.9** | **4.1** | **2.2 J** | **6.4** | **4.9** | **3.2 J** |
| PFNA | ng/L | 30 | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFDA | ng/L | 300 | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFUnA | ng/L | 3,000 | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFDoA | ng/L | 500 | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFTriA | ng/L | -- | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFTeA | ng/L | 10,000 | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **10** | **6.0** | **3.6** | **4.6** | **2.2 J** | **3.3 J** | **4.5** | **3.0 J** | **8.2** | **3.9** | **7.7** |
| PFPeS | ng/L | -- | **1.1 J** | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | **1.1 J** | **5.6** |
| PFHxS | ng/L | 40 | **3.5** | **3.1 J** | **2.5 J** | **2.7 J** | **3.0 J** | **2.1 J** | <0.90 U | **4.0** | **1.8 J** | **2.9 J** | **13** |
| PFHpS | ng/L | -- | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFOS | ng/L | 20 | **24** | **17** | **8.0** | **6.6** | **1.9 J** | **3.9** | **4.4** | **1.7 J** | **6.7** | **5.5** | **3.9 J** |
| PFNS | ng/L | -- | <0.88 U | <0.93 U | <0.91 U | <0.91 U | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFDS | ng/L | -- | <0.88 U | <0.93 U | <0.91 U | **1.0 J** | <0.89 U | <0.86 U | <0.90 U | <0.95 U | <0.93 U | <0.93 U | <0.99 U |
| PFDoS | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| 6:2 FTSA | ng/L | -- | **14** | **9.0** | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 LU |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.6 J** | **1.6 J** | **1.6 J** | **0.91 J** | <0.89 U | <0.86 U | **1.6 J** | **1.0 J** | <0.93 U | <0.93 U | <0.99 U |
| NMeFOSA | ng/L | -- | <3.5 U | <3.7 U | <3.6 U | <3.6 U | <3.6 U | <3.4 U | <3.6 U | <3.8 U | <3.7 U | <3.7 U | <4.0 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.9 U | <1.9 U | <1.9 U | <2.0 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **30.7** | **23.1** | **8** | **10.8** | **3.3** | **7.8** | **8.5** | **3.9** | **13.1** | **10.4** | **7.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **32.3** | **24.7** | **9.6** | **11.71** | **3.3** | **7.8** | **10.1** | **4.9** | **13.1** | **10.4** | **7.1** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 1.7 | 1.3 | 0.5 | 0.7 | 0.2 | 0.4 | 0.5 | 0.3 | 0.7 | 0.6 | 0.7 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Location | 213-0 | 2133-0 | 2136-0 | 2139-0 | 214-0 | 215-0 | 218-0 | 219-0 | 219-0 | 220-0 | 220-0 |
| | | Sample Date | 03/01/21 | 02/22/21 | 03/10/21 | 03/16/21 | 03/18/21 | 11/03/20 | 11/02/20 | 11/03/20 | 12/02/20 | 11/02/20 | 01/05/21 |
| | | Sample Number | 213-0 | 2133-0 | 2136-0 | 2139-0 | 214-0 | 215-0 | 218-0 | 219-0 | 219-0 POST-FILTER | 220-0 | 222-0 |
| | | Address | 2513 2Nd Avenue E | 2523 Baumgartner Drive | 2529 Baumgartner Drive | 2614 Baumgartner Drive | 2517 2Nd Avenue E | 2521 2Nd Avenue E | 2525 2Nd Avenue E | 2529 2Nd Avenue E | 2529 2Nd Avenue E | 2531 2Nd Avenue E | 2531 2Nd Avenue E |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **13** | **82** | **27** | **15** | **12** | **21** | **17** | **18** | **15** | **17** | **29** |
| PFPeA | ng/L | -- | <1.0 U | **2.0 J** | **2.1 J** | **4.2** | **11** | **18** | **13** | **5.0** | **4.5** | **8.7** | <1.0 U |
| PFHxA | ng/L | 150,000 | **2.3 J** | **2.0 J** | **2.2 J** | **3.5** | **40** | **86** | **45** | **8.9** | **7.3** | **11** | <1.0 U |
| PFHpA | ng/L | -- | <1.0 U | <0.92 U | <0.93 U | <0.88 U | **5.8** | **17** | **8.9** | **3.6** | **3.0 J** | **5.8** | <1.0 U |
| PFOA | ng/L | 20 | <1.0 U | **44** | **6.0** | **6.5** | **34** | **110** | **67** | **12** | **8.6** | **15** | <1.0 U |
| PFNA | ng/L | 30 | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFDA | ng/L | 300 | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFUnA | ng/L | 3,000 | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFDoA | ng/L | 500 | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFTriA | ng/L | -- | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFTeA | ng/L | 10,000 | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFHxDA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| PFODA | ng/L | 400,000 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| **Sulfonic Acids** | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **8.3** | **9.1** | **12** | **4.8** | **120** | **120** | **82** | **21** | **12** | **16** | **5.1** |
| PFPeS | ng/L | -- | **8.0** | **1.1 J** | <0.93 U | <0.88 U | **120** | **270** | **150** | **37** | **23** | **30** | **4.6** |
| PFHxS | ng/L | 40 | **17** | **6.3** | **2.4 J** | **1.6 J** | **730** | **2800** | **1800** | **360** | **260 S** | **420** | **12** |
| PFHpS | ng/L | -- | <1.0 U | <0.92 U | <0.93 U | <0.88 U | **24** | **69** | **80** | **6.8** | **4.4** | **11** | <1.0 U |
| PFOS | ng/L | 20 | **2.7 J** | **24** | **10** | **8.1** | **200** | **210** | **580** | **58** | **38** | **100** | **3.6 J** |
| PFNS | ng/L | -- | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFDS | ng/L | -- | <1.0 U | <0.92 U | <0.93 U | <0.88 U | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| PFDoS | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 4:2 FTSA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 6:2 FTSA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 8:2 FTSA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 10:2 FTSA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <1.0 U | <0.92 U | **2.2 J** | **1.1 J** | <0.90 U | <0.90 U | <0.95 U | <0.87 U | <0.98 U | <0.93 U | <1.0 U |
| NMeFOSA | ng/L | -- | <4.0 U | <3.7 U | <3.7 U | <3.5 U | <3.6 U | <3.6 U | <3.8 U | <3.5 U | <3.9 U | <3.7 U | <4.1 U |
| NEtFOSA | ng/L | 20 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| NMeFOSAA | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| NEtFOSAA | ng/L | 20 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| NMeFOSE | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| NEtFOSE | ng/L | 20 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| **Replacement Chemicals** | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| DONA | ng/L | 3,000 | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 9Cl-PF3ONS | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| 11Cl-PF3OUdS | ng/L | -- | <2.0 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <2.0 U | <1.9 U | <2.0 U |
| **Chemical Sum** | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **2.7** | **68** | **16** | **14.6** | **234** | **320** | **647** | **70** | **46.6** | **115** | **3.6** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **2.7** | **68** | **18.2** | **15.7** | **234** | **320** | **647** | **70** | **46.6** | **115** | **3.6** |
| **Hazard Index (HI)** | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 3.6 | 1.0 | 0.8 | 30.0 | 86.0 | 77.4 | 12.5 | 8.8 | 16.3 | 0.5 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 221-0 | 2224-0 | 223-0 | 2235-0 | 224-0 | 2244-0 | 225-0 | 2251-0 | 2252-0 | 2253-0 | 2257-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/27/20 | 03/17/21 | 01/18/21 | 03/23/21 | 12/22/20 | 03/25/21 | 10/29/20 | 03/09/21 | 03/16/21 | 03/16/21 | 03/04/21 |
| | | | Sample Number | 221-0 | 2224-0 | 223-0 | 223S-0 | 224-0 | 2244-0 | 225-0 | 2251-0 | 2252-0 | 2253-0 | 2257-1 |
| | | | Address | 2537 2Nd Avenue E | 2614 Thomas Street | 2545 2Nd Avenue E | 2613 Jerald Street | 2549 2Nd Avenue E | 2622 Jerald Street | 2553 2Nd Avenue E | 901 Steven Place | 2507 Lakeshore Drive | 2505 Lakeshore Drive | 904 Steven Place |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **13** | **33** | **37** | **7.6** | **21** | **18** | **10** | **29** | **47** | **72** | **130** |
| PFPeA | ng/L | -- | **1.9 J** | <0.88 U | <0.90 U | <1.1 U | <0.89 U | **5.3** | **1.8 J** | **2.1 J** | **6.1** | **2.0 J** | **3.6 J** |
| PFHxA | ng/L | 150,000 | **2.2 J** | <0.88 U | <0.90 U | <1.1 U | <0.89 U | **5.9** | **2.3 J** | **1.9 J** | **3.9** | **2.0 J** | **3.0 J** |
| PFHpA | ng/L | -- | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | **2.5 J** | **2.0 J** | **1.0 J** | **2.0 J** | **0.96 J** | **1.0 J** |
| PFOA | ng/L | 20 | <0.90 U | **2.4 J** | **2.3 J** | **1.7 J** | **2.2 J** | **4.2 B** | **7.5** | **6.7** | **14** | **22** | **37** |
| PFNA | ng/L | 30 | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | **1.6 J** | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFDA | ng/L | 300 | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFTriA | ng/L | -- | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **7.7** | **18** | **7.0** | **5.1** | **7.9** | **7.1** | **6.1** | **4.8** | **6.5** | **5.0** | **5.9** |
| PFPeS | ng/L | -- | **6.2** | **1.4 J** | **6.2** | <1.1 U | **6.7** | <0.87 U | **1.3 J** | <1.0 U | **0.98 J** | **1.5 J** | **2.6 J** |
| PFHxS | ng/L | 40 | **36** | **3.9** | **15** | **1.9 J** | **20** | **4.2** | **18** | **2.9 J** | **3.2 J** | **4.7** | **6.6** |
| PFHpS | ng/L | -- | <0.90 U | <0.88 U | **1.3 J** | <1.1 U | <0.89 U | <0.87 U | **1.1 J** | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFOS | ng/L | 20 | **5.0** | **21** | **12** | **10** | **14** | **3.2 BJ** | **21** | **4.8** | **10** | **14** | **13** |
| PFNS | ng/L | -- | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFDS | ng/L | -- | <0.90 U | <0.88 U | <0.90 U | <1.1 U | <0.89 U | <0.87 U | <0.93 U | <1.0 U | <0.98 U | <0.88 U | <0.92 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | **5.7 BJ** | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 LSU | <1.9 U | <2.1 U | **2.2 J** | **3.2 J** | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.90 U | **1.4 J** | <0.90 U | **5.2** | **0.98 J** | <0.87 U | <0.93 U | **1.1 J** | **1.2 J** | **2.1 J** | <0.92 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.5 U | <3.6 U | <4.5 U | <3.6 U | <3.5 U | <3.7 U | <4.2 U | <3.9 U | <3.5 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <2.2 U | <1.8 U | <1.7 U | <1.9 U | <2.1 U | <2.0 U | <1.8 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **5** | **23.4** | **14.3** | **11.7** | **16.2** | **7.4** | **28.5** | **11.5** | **24** | **36** | **50** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **5** | **24.8** | **14.3** | **16.9** | **17.18** | **7.4** | **28.5** | **12.6** | **25.2** | **38.1** | **50** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 1.2 | 1.3 | 1.1 | 0.9 | 1.4 | 0.5 | 1.9 | 0.7 | 1.3 | 2.0 | 2.7 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 226-0 | 227-0 | 228-0 | 229-0 | 230-0 | 2304-0 | 2305-0 | 2317-0 | 2317-0 | 232-0 | 2320-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/29/20 | 11/17/20 | 12/02/20 | 11/03/20 | 10/29/20 | 03/09/21 | 03/09/21 | 03/03/21 | 05/06/21 | 01/05/21 | 04/08/21 |
| | | | Sample Number | 226-0 | 227-0 | 228-0 | 229-0 | 230-0 | 2304-0 | 2305-0 | 2317-0 | 2317-0_20210506 | 232-0 | 2320-0 |
| | | | Address | 2557 2Nd Avenue E | 2561 2Nd Avenue E | 206 Fanta Reed Road | 2544 Bainbridge Street | 2540 Bainbridge Street | Caroline Street | 70 Dawson Place | 3313 Lakeshore Drive | 3313 Lakeshore Drive | 2536 Bainbridge Street | 424 Callaway Blvd |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **71** | **2.7 J** | **110** | **46** | **20** | **2.1 J** | **3.5 J** | **10** | **8.7** | **85** | **28 B** |
| PFPeA | ng/L | -- | <0.90 U | <0.91 U | **2.2 J** | **9.0** | **3.6** | <0.89 U | **1.3 J** | **1.1 J** | <0.56 U | <0.91 U | <0.53 U |
| PFHxA | ng/L | 150,000 | <0.90 U | <0.91 U | **1.4 J** | **39** | **7.9** | **1.1 J** | **1.4 J** | **1.9 J** | <0.70 U | <0.91 U | <0.67 U |
| PFHpA | ng/L | -- | <0.90 U | <0.91 U | <0.97 U | **3.7** | **1.2 J** | <0.89 U | **0.90 J** | <0.87 U | <0.46 U | <0.91 U | <0.43 U |
| PFOA | ng/L | 20 | **5.5** | <0.91 U | **11** | **26** | **8.2** | <0.89 U | **3.0 J** | **2.9 J** | <0.85 U | <0.91 U | **1.6 J** |
| PFNA | ng/L | 30 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | **0.54 J** | <0.91 U | <0.45 U |
| PFDA | ng/L | 300 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.54 U | <0.91 U | <0.51 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.64 U | <0.91 U | <0.61 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.48 U | <0.91 U | <0.46 U |
| PFTriA | ng/L | -- | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.54 U | <0.91 U | <0.51 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.61 U | <0.91 U | <0.58 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.84 U | <1.8 U | <0.79 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.0 U | <1.8 U | <0.97 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **6.5** | **0.98 J** | **6.5** | **34** | **12** | **3.5 J** | **4.8** | **6.0** | **3.9 J** | **9.9** | **1.6 J** |
| PFPeS | ng/L | -- | **4.8** | **0.92 J** | **4.4** | **86** | **22** | **1.4 J** | <0.90 U | **1.8 J** | <0.61 U | **9.8** | **1.3 J** |
| PFHxS | ng/L | 40 | **8.2** | **1.8 J** | **12** | **900** | **220** | **4.9** | **4.0** | **12 S** | **0.91 J** | **26** | **7.2** |
| PFHpS | ng/L | -- | <0.90 U | <0.91 U | <0.97 U | **51** | **7.6** | <0.89 U | <0.90 U | **1.7 J** | <0.51 U | <0.91 U | <0.48 U |
| PFOS | ng/L | 20 | **13** | **0.92 J** | <0.97 U | **2100** | **140** | <0.89 U | **4.9** | **250 S** | **6.7** | **9.2** | **3.6 J** |
| PFNS | ng/L | -- | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.73 U | <0.91 U | <0.69 U |
| PFDS | ng/L | -- | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.80 U | <0.91 U | <0.75 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.1 U | <1.8 U | <1.0 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.90 U | <1.8 U | <0.85 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 LU | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <2.0 U | <1.8 U | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.6 U | <1.8 U | <1.6 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.2 U | <1.8 U | <1.2 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.90 U | <0.91 U | <0.97 U | <0.90 U | <0.89 U | <0.89 U | <0.90 U | <0.87 U | <0.63 U | <0.91 U | **0.87 J** |
| NMeFOSA | ng/L | -- | <3.6 U | <3.6 U | <3.9 U | <3.6 U | <3.6 U | <3.6 U | <3.6 U | <3.5 U | <1.3 U | <3.6 U | <1.2 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.4 U | <1.8 U | <1.3 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.96 U | <1.8 U | <0.90 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.77 U | <1.8 U | <0.73 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.3 U | <1.8 U | <1.2 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.98 U | <1.8 U | <0.92 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <2.1 U | <1.8 U | <2.0 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.50 U | <1.8 U | <0.47 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.49 U | <1.8 U | <0.47 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <0.68 U | <1.8 U | <0.64 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **18.5** | **0.92** | **11** | **2126** | **148.2** | ND | **7.9** | **252.9** | **6.7** | **9.2** | **5.2** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **18.5** | **0.92** | **11** | **2126** | **148.2** | ND | **7.9** | **252.9** | **6.7** | **9.2** | **6.07** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 1.1 | 0.1 | 0.9 | 128.8 | 12.9 | 0.1 | 0.5 | 12.9 | 0.4 | 1.1 | 0.5 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 2327-0 | 233-0 | 234-0 | 236-0 | 237-0 | 238-0 | 239-0 | 240-0 | 242-0 | 243-0 | 244-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/29/21 | 11/03/20 | 12/02/20 | 10/27/20 | 10/29/20 | 10/27/20 | 11/03/20 | 10/27/20 | 12/17/20 | 01/05/21 | 10/27/20 |
| | | | Sample Number | 2327-0 | 233-0 | 234-0 | 236-0 | 237-0 | 238-0 | 239-0 | 240-0 | 242-0 | 243-0 | 244-0 |
| | | | Address | 75 Hinkley Road | 2534 Bainbridge Street | 2528 Bainbridge Street | UNK | 2520 Bainbridge Street | 2514 Bainbridge Street | 2512 Bainbridge Street | 2508 Bainbridge Street | 2500 Bainbridge Street | 2501 1St Avenue E | 2505 1St Avenue E |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **7.1** | **11** | **8.4** | **12** | **20** | **9.6** | **28** | **8.4** | **5.7** | **8.7** | **17** |
| PFPeA | ng/L | -- | <0.90 U | **1.2 J** | **1.1 J** | **1.2 J** | **0.95 J** | <0.89 U | **1.8 J** | **2.5 J** | **1.2 J** | <0.93 U | <0.98 U |
| PFHxA | ng/L | 150,000 | <0.90 U | **2.2 J** | <0.94 U | **1.2 J** | **1.4 J** | <0.89 U | **1.9 J** | **1.6 J** | <0.92 U | <0.93 U | **1.1 J** |
| PFHpA | ng/L | -- | <0.90 U | <0.90 U | <0.94 U | **1.2 J** | **1.1 J** | <0.89 U | **1.2 J** | **1.6 J** | <0.92 U | <0.93 U | <0.98 U |
| PFOA | ng/L | 20 | **0.92 J** | <0.90 U | **2.9 J** | **4.4** | **2.2 J** | <0.89 U | <0.91 U | **4.7** | **1.9 J** | <0.93 U | <0.98 U |
| PFNA | ng/L | 30 | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFDA | ng/L | 300 | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFTriA | ng/L | -- | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.2 J** | **6.6** | **2.3 J** | **4.5** | **10** | **9.6** | **5.6** | **2.3 J** | <0.92 U | **3.1 J** | **6.4** |
| PFPeS | ng/L | -- | <0.90 U | **6.1** | <0.94 U | **1.7 J** | **6.3** | **6.1** | **3.8** | <1.0 U | <0.92 U | **2.3 J** | **4.3** |
| PFHxS | ng/L | 40 | **2.3 J** | **20** | **9.2** | **8.1** | **17** | **12** | **14** | **3.7 J** | **1.0 J** | **6.3** | **13** |
| PFHpS | ng/L | -- | <0.90 U | **0.97 J** | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFOS | ng/L | 20 | **1.0 J** | **6.5** | <0.94 U | **7.1** | **11** | **7.6** | **8.3** | **4.6** | **2.3 J** | **2.8 J** | <0.98 U |
| PFNS | ng/L | -- | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFDS | ng/L | -- | <0.90 U | <0.90 U | <0.94 U | <0.98 U | <0.86 U | <0.89 U | <0.91 U | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.2 J** | <0.90 U | <0.94 U | <0.98 U | <0.86 U | **0.96 J** | **1.1 J** | <1.0 U | <0.92 U | <0.93 U | <0.98 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.6 U | <3.8 U | <3.9 U | <3.4 U | <3.5 U | <3.6 U | <4.0 U | <3.7 U | <3.7 U | <3.9 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | **2.2 BJ** |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **1.92** | **6.5** | **2.9** | **11.5** | **13.2** | **7.6** | **8.3** | **9.3** | **4.2** | **2.8** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **3.12** | **6.5** | **2.9** | **11.5** | **13.2** | **8.56** | **9.4** | **9.3** | **4.2** | **2.8** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.2 | 0.8 | 0.4 | 0.8 | 1.1 | 0.7 | 0.8 | 0.6 | 0.2 | 0.3 | 0.3 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 245-0 | 246-0 | 247-0 | 248-0 | 250-0 | 251-0 | 252-0 | 255-0 | 256-0 | 2717-FR | 282-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 11/05/20 | 10/29/20 | 11/03/20 | 10/27/20 | 10/29/20 | 10/29/20 | 11/03/20 | 11/05/20 | 10/27/20 | 11/16/20 | 02/03/21 |
| | | | Sample Number | 245-0 | 246-0 | 247-0 | 248-0 | 250-0 | 251-0 | 252-0 | 255-0 | 256-0 | 2717-FR | 282-0 |
| | | | Address | 2507 1St Avenue E | 2513 1St Avenue E | 2517 1St Avenue E | 2521 1St Avenue E | 2529 1St Avenue E | 2533 1St Avenue E | 2537 1St Avenue E | 2545 1St Avenue E | 2553 1St Avenue E | 2717 Fanta Reed Road | 207 Church Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **12 B** | **14** | **18** | **6.9** | **87** | **33** | **15** | **33 B** | **16** | **19 H** | **1.3 J** |
| PFPeA | ng/L | -- | <0.86 U | **2.4 J** | <0.88 U | <0.93 U | <0.99 U | **8.9** | **6.1** | **3.8** | **13** | **33 H** | <1.1 U |
| PFHxA | ng/L | 150,000 | <0.86 U | **2.0 J** | <0.88 U | <0.93 U | **1.4 J** | **37** | **24** | **15** | **23** | **41 H** | <1.1 U |
| PFHpA | ng/L | -- | <0.86 U | **1.3 J** | <0.88 U | <0.93 U | <0.99 U | **6.8** | **5.7** | **3.2 J** | **8.1** | **22 H** | <1.1 U |
| PFOA | ng/L | 20 | <0.86 U | **4.0** | <0.88 U | <0.93 U | <0.99 U | **70** | **38** | **27 B** | **19** | **90 H** | <1.1 U |
| PFNA | ng/L | 30 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | **2.2 HJ** | <1.1 U |
| PFDA | ng/L | 300 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFUnA | ng/L | 3,000 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFDoA | ng/L | 500 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFTriA | ng/L | -- | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFTeA | ng/L | 10,000 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFHxDA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| PFODA | ng/L | 400,000 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.9 B** | **7.7** | **3.9** | **2.4 J** | **9.2** | **39** | **35** | **28 B** | **19** | **2.1 HJ** | <1.1 U |
| PFPeS | ng/L | -- | **3.4** | **4.3** | **2.3 J** | **1.4 J** | **6.1** | **120** | **77 S** | **51 S** | **35** | **1.6 HJ** | <1.1 U |
| PFHxS | ng/L | 40 | **6.7** | **11** | **17** | **7.7** | **13** | **1900** | **950** | **580 S** | **600** | **26 H** | **1.7 J** |
| PFHpS | ng/L | -- | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | **110** | **38** | **25** | **32** | **1.7 HJ** | <1.1 U |
| PFOS | ng/L | 20 | **9.0** | **12** | **4.7** | **2.1 J** | **7.0** | **1300** | **310 S** | **190 S** | **970** | **20 H** | **4.0 BJ** |
| PFNS | ng/L | -- | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFDS | ng/L | -- | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | <0.89 U | <0.89 U | <0.97 HU | <1.1 U |
| PFDoS | ng/L | -- | <1.7 LU | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 LU | <1.8 U | <1.9 HU | <2.2 U |
| 4:2 FTSA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| 6:2 FTSA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | **18 B** | <1.9 HLU | <2.2 U |
| 8:2 FTSA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| 10:2 FTSA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.86 U | <0.90 U | <0.88 U | <0.93 U | <0.99 U | <0.87 U | <0.89 U | **1.2 J** | <0.89 U | **1.6 HJ** | **2.1 J** |
| NMeFOSA | ng/L | -- | <3.4 U | <3.6 U | <3.5 U | <3.7 U | <4.0 U | <3.5 U | <3.6 U | <3.6 U | <3.5 U | <3.9 HU | <4.3 U |
| NEtFOSA | ng/L | 20 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| NMeFOSAA | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| NEtFOSAA | ng/L | 20 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| NMeFOSE | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| NEtFOSE | ng/L | 20 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| DONA | ng/L | 3,000 | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| 9Cl-PF3ONS | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.9 HU | <2.2 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **9** | **16** | **4.7** | **2.1** | **7** | **1370** | **348** | **217** | **989** | **110** | **4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **9** | **16** | **4.7** | **2.1** | **7** | **1370** | **348** | **218.2** | **989** | **111.6** | **6.1** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 1.1 | 0.7 | 0.3 | 0.7 | 116.0 | 41.2 | 25.4 | 64.5 | 6.3 | 0.3 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 30-0 | 31-0 | 328-0 | 329-0 | 330-0 | 332-0 | 333-0 | 334-0 | 335-0 | 336-0 | 337-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/03/21 | 03/03/21 | 11/03/20 | 10/29/20 | 10/27/20 | 12/23/20 | 11/03/20 | 11/03/20 | 01/13/21 | 01/05/21 | 12/02/20 |
| | | | Sample Number | 30-0 | 31-0 | 328-0 | 329-0 | 330-0 | 332-0 | 333-0 | 334-0 | 335-0 | 336-0 | 337-0 |
| | | | Address | 500 Sanborn Street | 2822 Lakeshore Drive | 2530 1St Avenue W | 2529 Bainbridge Street | 2533 Bainbridge Street | 2538 1St Avenue W | 2537 Bainbridge Street | 2541 Bainbridge Street | 2542 1St Avenue W | 2546 1St Avenue W | 2545 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **80** | **32** | **64** | **37** | **36** | **370 S** | **18** | **36** | **50** | **54** | **82** |
| PFPeA | ng/L | -- | **9.8** | **4.4** | <0.97 U | <0.92 U | <0.90 U | <0.93 U | **1.4 J** | **2.0 J** | <0.91 U | **4.0** | **1.7 J** |
| PFHxA | ng/L | 150,000 | **6.5** | **3.1 J** | **1.3 J** | **1.2 J** | **0.91 J** | <0.93 U | **1.3 J** | **3.4** | <0.91 U | **3.6** | **2.2 J** |
| PFHpA | ng/L | -- | **1.7 J** | **1.7 J** | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | **1.0 J** | <0.94 U |
| PFOA | ng/L | 20 | **45** | **6.2** | **13** | **13** | **9.5** | **19** | <0.92 U | <0.86 U | **9.3** | **3.0 J** | **3.7 J** |
| PFNA | ng/L | 30 | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFDA | ng/L | 300 | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFUnA | ng/L | 3,000 | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFDoA | ng/L | 500 | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFTriA | ng/L | -- | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFTeA | ng/L | 10,000 | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFHxDA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.7** | **12** | **8.5** | **4.1** | **4.0** | **8.9** | **5.6** | **9.4** | **7.6** | **5.8** | **11** |
| PFPeS | ng/L | -- | **1.6 J** | <1.0 U | **5.7** | **2.7 J** | **2.4 J** | **7.5** | **6.0** | **8.8** | **5.7** | **4.0** | **9.8** |
| PFHxS | ng/L | 40 | **4.1** | <1.0 U | **12** | **10** | **9.7** | **14** | **21** | **27** | **12** | **9.5** | **25** |
| PFHpS | ng/L | -- | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | **1.3 J** |
| PFOS | ng/L | 20 | **10** | **8.9** | **12** | **8.2** | **11** | **16** | **4.1** | **5.8** | **14** | **4.1** | **11** |
| PFNS | ng/L | -- | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFDS | ng/L | -- | <0.95 U | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| PFDoS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | **11 B** | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **3.0 J** | <1.0 U | <0.97 U | <0.92 U | <0.90 U | <0.93 U | <0.92 U | <0.86 U | <0.91 U | <0.90 U | <0.94 U |
| NMeFOSA | ng/L | -- | <3.8 U | <4.1 U | <3.9 U | <3.7 U | <3.6 U | <3.7 U | <3.7 U | <3.4 U | <3.6 U | <3.6 U | <3.8 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **55** | **15.1** | **25** | **21.2** | **20.5** | **35** | **4.1** | **5.8** | **23.3** | **7.1** | **14.7** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **58** | **15.1** | **25** | **21.2** | **20.5** | **35** | **4.1** | **5.8** | **23.3** | **7.1** | **14.7** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 3.0 | 0.8 | 1.6 | 1.3 | 1.3 | 2.1 | 0.7 | 1.0 | 1.5 | 0.6 | 1.4 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 338-0 | 339-0 | 340-0 | 341-0 | 342-0 | 343-0 | 344-0 | 345-0 | 346-0 | 347-0 | 348-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 11/18/20 | 10/27/20 | 10/29/20 | 10/29/20 | 11/24/20 | 11/03/20 | 10/29/20 | 10/27/20 | 11/09/20 | 11/05/20 | 02/24/21 |
| | | | Sample Number | 338-0 | 339-0 | 340-0 | 341-0 | 342-0 | 343-0 | 344-0 | 345-0 | 346-0 | 347-0 | 348-0 |
| | | | Address | 2549 Bainbridge Street | 2550 1St Avenue W | 2554 1St Avenue W | 2555 Bainbridge Street | 2559 Bainbridge Street | 2558 1St Avenue W | 111 Callaway Boulevard | 2509 Bainbridge Street | 2504 1St Avenue W | 2510 1St Avenue W | 2515 Bainbridge Street |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **7.8** | **48** | **48** | **30** | **63** | **44** | **3.5** | **4.7** | **15** | **13** | **18** |
| PFPeA | ng/L | -- | **1.5 J** | **3.5 J** | **1.9 J** | **4.1 J** | **5.7** | **1.6 J** | **1.1 J** | <0.86 U | **1.6 J** | <0.87 U | <0.92 U |
| PFHxA | ng/L | 150,000 | **3.4 J** | **3.2 J** | **2.4 J** | **13** | **17** | **2.7 J** | **1.4 J** | <0.86 U | **2.4 J** | <0.87 U | <0.92 U |
| PFHpA | ng/L | -- | <1.2 U | <0.93 U | <1.0 U | **2.5 J** | **1.7 J** | **1.1 J** | <0.88 U | <0.86 U | **5.2** | <0.87 U | <0.92 U |
| PFOA | ng/L | 20 | **6.3** | **2.9 J** | **5.8** | **21** | **22** | **10** | **4.3** | **2.0 J** | **16** | **1.8 J** | <0.92 U |
| PFNA | ng/L | 30 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFDA | ng/L | 300 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFUnA | ng/L | 3,000 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFDoA | ng/L | 500 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFTriA | ng/L | -- | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFTeA | ng/L | 10,000 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFHxDA | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| PFODA | ng/L | 400,000 | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **6.5** | **6.3** | **6.9** | **22** | **19** | **6.9** | **1.3 J** | **2.3 J** | **1.5 J** | **6.1** | **2.6 J** |
| PFPeS | ng/L | -- | **13** | **5.0** | **7.5** | **44** | **37** | **10** | <0.88 U | **0.90 J** | <0.87 U | **5.0** | **2.8 J** |
| PFHxS | ng/L | 40 | **130** | **18** | **32** | **760** | **460 S** | **87** | **2.3 J** | **1.9 J** | **17** | **6.5** | **6.2** |
| PFHpS | ng/L | -- | **5.8** | <0.93 U | <1.0 U | **46** | **32** | **2.4 J** | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFOS | ng/L | 20 | **160** | **4.4** | **4.0 J** | **1400** | **930** | **38** | **1.8 J** | **3.0 J** | **2.8 J** | **4.7** | **7.5** |
| PFNS | ng/L | -- | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFDS | ng/L | -- | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U |
| PFDoS | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | <2.3 LU | <1.9 U | <2.1 U | <2.1 U | <1.9 SU | <1.7 U | <1.8 U | <1.7 U | <1.9 U | <1.7 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <1.2 U | <0.93 U | <1.0 U | <1.0 U | <0.94 U | <0.87 U | <0.88 U | **0.88 J** | <0.87 U | <0.87 U | <0.92 U |
| NMeFOSA | ng/L | -- | <4.6 U | <3.7 U | <4.1 U | <4.2 U | <3.8 U | <3.5 U | <3.5 U | <3.4 U | <3.5 U | <3.5 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| NMeFOSE | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <2.3 U | **2.2 BJ** | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| DONA | ng/L | 3,000 | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <2.3 U | <1.9 U | <2.1 U | <2.1 U | <1.9 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **166.3** | **7.3** | **9.8** | **1421** | **952** | **48** | **6.1** | **5** | **18.8** | **6.5** | **7.5** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **166.3** | **7.3** | **9.8** | **1421** | **952** | **48** | **6.1** | **5.88** | **18.8** | **6.5** | **7.5** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 11.6 | 0.8 | 1.3 | 90.1 | 59.1 | 4.6 | 0.4 | 0.3 | 1.4 | 0.5 | 0.5 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 349-0 | 350-0 | 351-0 | 352-0 | 353-0 | 354-0 | 355-0 | 356-0 | 357-0 | 358-0 | 359-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 12/08/20 | 11/02/20 | 10/29/20 | 10/29/20 | 02/22/21 | 01/25/21 | 03/03/21 | 01/28/21 | 01/28/21 | 01/25/21 | 01/25/21 |
| | | | Sample Number | 349-0 | 350-0 | 351-0 | 352-0 | 353-0 | 354-0 | 355-0 | 356-0 | 357-0 | 358-0 | 359-0 |
| | | | Address | 2521 Bainbridge Street | 2514 1St Avenue W | 2518 1St Avenue W | 2526 1St Avenue W | 2525 Bainbridge Street | 310 Callaway Boulevard | 306 Callaway Boulevard | 304 Callaway Boulevard | 302 Callaway Boulevard | 300 Callaway Boulevard | 212 Callaway Boulevard |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **41** | **4.3** | **34** | **34** | **40** | **1.8 J** | **1.2 J** | **3.4** | **6.2** | <1.1 U | **8.5** |
| PFPeA | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | **1.6 J** |
| PFHxA | ng/L | 150,000 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | **1.2 J** |
| PFHpA | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFOA | ng/L | 20 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | **7.3** | <1.0 U | **1.8 J** | <0.86 U | <0.89 U | <1.1 U | **3.2 J** |
| PFNA | ng/L | 30 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFDA | ng/L | 300 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFUnA | ng/L | 3,000 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFDoA | ng/L | 500 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFTriA | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFTeA | ng/L | 10,000 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.4** | **2.4 J** | **5.4** | **4.3** | **11** | <1.0 U | **0.87 J** | **1.1 J** | **1.7 J** | <1.1 U | **3.9** |
| PFPeS | ng/L | -- | **3.4 J** | **1.3 J** | **3.5 J** | **3.2 J** | **9.8** | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | **6.4** |
| PFHxS | ng/L | 40 | **11** | **2.0 J** | **6.7** | **6.2** | **16** | **1.7 J** | **4.6** | **1.7 J** | **1.8 J** | **3.3 J** | **73** |
| PFHpS | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | **1.2 J** | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFOS | ng/L | 20 | **7.1** | **3.4 J** | **8.4** | <0.91 U | **7.1** | <1.0 U | <0.87 U | <0.86 U | **3.1 J** | **1.6 J** | **3.9** |
| PFNS | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFDS | ng/L | -- | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | <1.0 U | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| PFDoS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.95 U | <0.93 U | <0.93 U | <0.91 U | <0.91 U | **1.1 J** | <0.87 U | <0.86 U | <0.89 U | <1.1 U | <0.94 U |
| NMeFOSA | ng/L | -- | <3.8 U | <3.7 U | <3.7 U | <3.6 U | <3.6 U | <4.2 U | <3.5 U | <3.4 U | <3.5 U | <4.3 U | <3.8 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <2.1 U | <1.7 U | <1.7 U | <1.8 U | <2.1 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **7.1** | **3.4** | **8.4** | ND | **14.4** | ND | **1.8** | ND | **3.1** | **1.6** | **7.1** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **7.1** | **3.4** | **8.4** | ND | **14.4** | **1.1** | **1.8** | ND | **3.1** | **1.6** | **7.1** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.6 | 0.2 | 0.6 | 0.2 | 1.1 | 0.1 | 0.2 | 0.0 | 0.2 | 0.2 | 2.2 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 360-0 | 361-0 | 362-0 | 363-0 | 364-0 | 365-0 | 366-0 | 368-0 | 369-0 | 370-0 | 372-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/27/20 | 10/29/20 | 01/13/21 | 11/03/20 | 01/18/21 | 11/16/20 | 11/09/20 | 02/15/21 | 10/27/20 | 10/29/20 | 01/14/21 |
| | | | Sample Number | 360-0 | 361-0 | 362-0 | 363-0 | 364-0 | 365-0 | 366-0 | 368-0 | 369-0 | 370-0 | 372-0 |
| | | | Address | 208 Callaway Boulevard | 204 Callaway Boulevard | 110 Callaway Boulevard | 2501 Bainbridge Street | 2502 2Nd Avenue W | 2501 1St Avenue W | 2505 1St Avenue W | 2510 2Nd Avenue W | 2511 1St Avenue W | 2515 1St Avenue W | 2518 2Nd Avenue W |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **150** | **8.6 B** | **2.1 J** | **4.6** | **7.9** | **1.9 HJ** | **13** | **4.2** | **46** | **6.1** | **2.5 J** |
| PFPeA | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | **1.2 HJ** | <0.93 U | **1.3 J** | <0.88 U | <0.91 U | <0.91 U |
| PFHxA | ng/L | 150,000 | **1.8 J** | <0.86 U | <1.1 U | <0.88 U | <0.93 U | **1.5 HJ** | <0.93 U | **2.0 J** | <0.88 U | <0.91 U | <0.91 U |
| PFHpA | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | **1.7 J** | <0.88 U | <0.91 U | <0.91 U |
| PFOA | ng/L | 20 | **26** | **0.93 BJ** | **1.9 J** | <0.88 U | <0.93 U | **3.2 HJ** | <0.93 U | **6.1** | <0.88 U | <0.91 U | <0.91 U |
| PFNA | ng/L | 30 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFDA | ng/L | 300 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFUnA | ng/L | 3,000 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFDoA | ng/L | 500 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFTriA | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFTeA | ng/L | 10,000 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **7.9** | **3.1 BJ** | **1.7 J** | **1.6 J** | <0.93 U | <0.87 HU | **2.9 J** | **1.1 J** | **5.7** | **1.9 J** | <0.91 U |
| PFPeS | ng/L | -- | **5.9** | **2.0 J** | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | **2.1 J** | <0.98 U | **4.3** | <0.91 U | <0.91 U |
| PFHxS | ng/L | 40 | **15** | **3.7** | **1.6 J** | **2.5 J** | <0.93 U | **4.2 H** | **5.3** | **2.0 J** | **10** | **3.9** | **1.7 J** |
| PFHpS | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFOS | ng/L | 20 | **11** | **1.9 BJ** | **1.6 J** | **3.7** | <0.93 U | **7.9 H** | <0.93 U | **3.9** | **6.2** | **1.8 J** | <0.91 U |
| PFNS | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFDS | ng/L | -- | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| PFDoS | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HLU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.95 U | <0.86 U | <1.1 U | <0.88 U | <0.93 U | <0.87 HU | <0.93 U | <0.98 U | <0.88 U | <0.91 U | <0.91 U |
| NMeFOSA | ng/L | -- | <3.8 U | <3.4 U | <4.4 U | <3.5 U | <3.7 U | <3.5 HU | <3.7 U | <3.9 U | <3.5 U | <3.6 U | <3.6 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | **2.2 BJ** | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.7 U | <2.2 U | <1.8 U | <1.9 U | <1.7 HU | <1.9 U | <2.0 U | <1.8 U | <1.8 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **37** | **2.83** | **3.5** | **3.7** | ND | **11.1** | ND | **10** | **6.2** | **1.8** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **37** | **2.83** | **3.5** | **3.7** | ND | **11.1** | ND | **10** | **6.2** | **1.8** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 2.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.7 | 0.1 | 0.6 | 0.6 | 0.2 | 0.0 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 373-0 | 374-0 | 375-0 | 376-0 | 377-0 | 378-0 | 379-0 | 380-0 | 381-0 | 383-0 | 384-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 10/29/20 | 01/31/21 | 01/25/21 | 03/02/21 | 03/09/21 | 02/03/21 | 02/03/21 | 03/03/21 | 01/25/21 | 11/17/20 | 12/22/20 |
| | | | Sample Number | 373-0 | 374-0 | 375-0 | 376-0 | 377-0 | 378-0 | 379-0 | 380-0 | 381-0 | 383-0 | 384-0 |
| | | | Address | 2519 1St Avenue W | 2523 1St Avenue W | 2522 2Nd Avenue W | 2503 2Nd Avenue W | 2507 2Nd Avenue W | 2511 2Nd Avenue W | 2515 2Nd Avenue W | 2525 2Nd Avenue W | 2527 2Nd Avenue W | 2531 1St Avenue W | 2535 1St Avenue W |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **4.7** | **8.9** | **3.5 J** | **36** | **60** | **35** | **16** | **140** | **18** | **16** | **34** |
| PFPeA | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFHxA | ng/L | 150,000 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFHpA | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFOA | ng/L | 20 | <0.91 U | **1.4 J** | <0.89 U | **1.8 J** | **5.8** | **1.2 J** | **2.3 J** | **11** | <0.97 U | <0.99 U | <0.93 U |
| PFNA | ng/L | 30 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFDA | ng/L | 300 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFUnA | ng/L | 3,000 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFDoA | ng/L | 500 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFTriA | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFTeA | ng/L | 10,000 | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFHxDA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.0 J** | **2.2 J** | <0.89 U | **4.4** | **6.0** | **1.6 J** | **1.5 J** | **6.8** | <0.97 U | **2.5 J** | **2.0 J** |
| PFPeS | ng/L | -- | **1.2 J** | **1.6 J** | <0.89 U | **3.0 J** | **4.9** | **1.1 J** | <0.98 U | **5.4** | <0.97 U | **1.7 J** | **1.2 J** |
| PFHxS | ng/L | 40 | **2.3 J** | **4.0 J** | **3.2 J** | **5.6** | **9.0** | **3.5 J** | **3.5 J** | **11** | **2.2 J** | **3.0 J** | **3.2 J** |
| PFHpS | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFOS | ng/L | 20 | <0.91 U | **4.2 J** | <0.89 U | **4.7** | <0.88 SU | **2.7 J** | **5.5** | **8.8** | **1.4 J** | <0.99 U | **2.5 J** |
| PFNS | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFDS | ng/L | -- | <0.91 U | <1.1 U | <0.89 U | <0.93 U | <0.88 U | <0.90 U | <0.98 U | <0.92 U | <0.97 U | <0.99 U | <0.93 U |
| PFDoS | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | **4.9 J** | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 LU | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.91 U | <1.1 U | <0.89 U | **1.0 J** | <0.88 U | <0.90 U | <0.98 U | <0.92 U | **1.2 J** | <0.99 U | <0.93 U |
| NMeFOSA | ng/L | -- | <3.6 U | <4.3 U | <3.6 U | <3.7 U | <3.5 U | <3.6 U | <3.9 U | <3.7 U | <3.9 U | <4.0 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <2.2 U | <1.8 U | <1.9 U | <1.8 U | <1.8 U | <2.0 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | ND | **5.6** | ND | **6.5** | **5.8** | **3.9** | **7.8** | **19.8** | **1.4** | ND | **2.5** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | ND | **5.6** | ND | **7.5** | **5.8** | **3.9** | **7.8** | **19.8** | **2.6** | ND | **2.5** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 0.4 | 0.1 | 0.5 | 0.5 | 0.3 | 0.5 | 1.3 | 0.2 | 0.1 | 0.2 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 385-0 | 386-0 | 387-0 | 388-0 | 389-0-A | 389-0-B | 406-2 | 408-0 | 412-0 | 415-0 | 425-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 11/03/20 | 10/27/20 | 12/22/20 | 10/29/20 | 11/02/20 | 11/02/20 | 01/25/21 | 01/26/21 | 01/26/21 | 03/08/21 | 03/09/21 |
| | | | Sample Number | 385-0 | 386-0 | 387-0 | 388-0 | 389-0-A | 389-0-B | 406-2 | 408-0 | 412-0 | 415-0 | 425-0 |
| | | | Address | 2539 1St Avenue W | 2543 1St Avenue W | 2547 1St Avenue W | 2551 1St Avenue W | 2555 1St Avenue W | 2557 1St Avenue W | Plainview Road | 2642 Muth Road | 504 Dauphin Street | 2618 Lakeshore Drive | 2607 Hibbard Court |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **66** | **100** | **110** | **130** | **110** | **130** | **13** | **97** | **50** | **52** | **35** |
| PFPeA | ng/L | -- | <0.94 U | **1.9 J** | <0.95 U | <1.1 U | <0.89 U | <0.87 U | **1.4 J** | **7.0** | **6.7** | <0.88 U | **2.1 J** |
| PFHxA | ng/L | 150,000 | **0.95 J** | <0.98 U | <0.95 U | <1.1 U | **1.2 J** | <0.87 U | **1.1 J** | **3.9** | **4.9** | **1.4 J** | **2.6 J** |
| PFHpA | ng/L | -- | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | **0.97 J** | **1.4 J** | <0.88 U | <0.87 U |
| PFOA | ng/L | 20 | **13** | **19** | **19** | **15** | **3.5** | <0.87 U | **2.9 J** | **32** | **18** | **29** | **6.8** |
| PFNA | ng/L | 30 | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFDA | ng/L | 300 | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFUnA | ng/L | 3,000 | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFDoA | ng/L | 500 | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFTriA | ng/L | -- | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFTeA | ng/L | 10,000 | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFHxDA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **4.2** | **6.3** | **8.1** | **9.9** | **12** | **10** | **3.6 J** | **3.8** | **2.9 J** | **12** | **3.8** |
| PFPeS | ng/L | -- | **3.4 J** | **4.9** | **5.9** | **7.0** | **7.9** | **7.9** | <0.92 U | **2.3 J** | **0.97 J** | **1.5 J** | <0.87 U |
| PFHxS | ng/L | 40 | **7.4** | **8.9** | **12** | **15** | **14** | **16** | **2.9 J** | **5.8** | **4.7** | **4.6** | **2.3 J** |
| PFHpS | ng/L | -- | <0.94 U | <0.98 U | <0.95 U | **1.3 J** | **0.96 J** | **1.1 J** | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFOS | ng/L | 20 | **13** | **13** | **18** | **18** | **18** | **15** | **1.9 J** | **15** | **5.9** | **17** | **4.5** |
| PFNS | ng/L | -- | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFDS | ng/L | -- | <0.94 U | <0.98 U | <0.95 U | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | <0.88 U | <0.87 U |
| PFDoS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.94 U | <0.98 U | **0.96 J** | <1.1 U | <0.89 U | <0.87 U | <0.92 U | <0.91 U | <0.87 U | **1.2 J** | <0.87 U |
| NMeFOSA | ng/L | -- | <3.7 U | <3.9 U | <3.8 U | <4.4 U | <3.5 U | <3.5 U | <3.7 U | <3.6 U | <3.5 U | <3.5 U | <3.5 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <2.0 U | <1.9 U | <2.2 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **26** | **32** | **37** | **33** | **21.5** | **15** | **4.8** | **47** | **23.9** | **46** | **11.3** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **26** | **32** | **37.96** | **33** | **21.5** | **15** | **4.8** | **47** | **23.9** | **47.2** | **11.3** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 1.5 | 1.8 | 2.2 | 2.0 | 1.4 | 1.2 | 0.3 | 2.5 | 1.3 | 2.5 | 0.6 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 427-0 | 431-0 | 434-0 | 437-0 | 439-1 | 440-0 | 468-0 | 469-0 | 47-0 | 470-0 | 471-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/03/21 | 03/08/21 | 03/31/21 | 03/09/21 | 02/23/21 | 03/18/21 | 02/15/21 | 01/31/21 | 03/02/21 | 01/21/21 | 01/25/21 |
| | | | Sample Number | 427-0 | 431-0 | 434-0 | 437-0 | 439-1 | 440-0 | 468-0 | 469-0 | 47-0 | 470-0 | 471-0 |
| | | | Address | 2609 Hibbard Court | 701 Dauphin Street | 2616 Hibbard Court | 2608 Hibbard Court | 2602 Hibbard Court | 601 Dauphin Street | 2500 3Rd Avenue W | 2504 3Rd Avenue W | 2735 Grand Avenue | 2508 3Rd Avenue W | 2512 3Rd Avenue W |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **25** | **21** | **32** | **59** | **140** | **8.8** | **1.6 J** | **11** | **48** | **34** | **74** |
| PFPeA | ng/L | -- | **1.8 J** | **8.4** | **4.5** | **7.6** | **5.2** | **1.5 J** | <0.93 U | <0.95 U | **5.3** | <0.93 U | <0.89 U |
| PFHxA | ng/L | 150,000 | **2.0 J** | **8.9** | **3.1 J** | **6.4** | **3.4 J** | **1.8 J** | <0.93 U | <0.95 U | **4.0** | <0.93 U | **0.93 J** |
| PFHpA | ng/L | -- | **0.95 J** | **5.1** | **1.0 J** | **3.5** | <0.90 U | <0.92 U | <0.93 U | <0.95 U | **2.8 J** | <0.93 U | <0.89 U |
| PFOA | ng/L | 20 | **12** | **22** | **17** | **24** | **50** | **3.0 J** | **1.1 J** | **1.1 J** | **22** | **2.4 J** | **4.4** |
| PFNA | ng/L | 30 | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFDA | ng/L | 300 | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFUnA | ng/L | 3,000 | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFDoA | ng/L | 500 | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFTriA | ng/L | -- | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFTeA | ng/L | 10,000 | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **3.7** | **11** | **3.8** | **3.7** | **4.2** | **2.3 J** | <0.93 U | **1.9 J** | **6.6** | **4.5** | **5.0** |
| PFPeS | ng/L | -- | <0.91 U | **1.2 J** | **1.0 J** | **1.4 J** | **2.6 J** | <0.92 U | <0.93 U | <0.95 U | **1.3 J** | **2.9 J** | **3.9** |
| PFHxS | ng/L | 40 | **2.0 J** | **13** | **3.5 J** | **5.7** | **6.5** | **1.8 J** | **1.2 J** | **2.9 J** | **6.1** | **5.6** | **8.6** |
| PFHpS | ng/L | -- | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFOS | ng/L | 20 | <0.91 U | **4.9** | **5.0** | **8.7** | **5.3** | **3.7** | **1.4 J** | **2.7 J** | **10** | **4.7** | **5.8** |
| PFNS | ng/L | -- | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFDS | ng/L | -- | <0.91 U | <0.88 U | <0.96 U | <0.87 U | <0.90 U | <0.92 U | <0.93 U | <0.95 U | <0.86 U | <0.93 U | <0.89 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | **25** | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.91 U | **1.4 J** | <0.96 U | <0.87 U | **1.0 J** | <0.92 U | <0.93 U | **1.5 J** | <0.86 U | <0.93 U | <0.89 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.5 U | <3.8 U | <3.5 U | <3.6 U | <3.7 U | <3.7 U | <3.8 U | <3.4 U | <3.7 U | <3.5 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.9 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U | <1.9 U | <1.7 U | <1.9 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **12** | **26.9** | **22** | **32.7** | **55.3** | **6.7** | **2.5** | **3.8** | **32** | **7.1** | **10.2** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **12** | **28.3** | **22** | **32.7** | **56.3** | **6.7** | **2.5** | **5.3** | **32** | **7.1** | **10.2** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.7 | 1.7 | 1.2 | 1.8 | 3.0 | 0.4 | 0.2 | 0.3 | 1.8 | 0.5 | 0.7 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Location | 472-0 | 49-0 | 492-0 | 493-0 | 512-0 | 519-0 | 522-0 | 523-0 | 531-0 | 534-0 | 547-0 |
| | | Sample Date | 03/08/21 | 02/24/21 | 03/10/21 | 03/03/21 | 03/02/21 | 03/11/21 | 03/08/21 | 03/08/21 | 02/24/21 | 03/10/21 | 03/01/21 |
| | | Sample Number | 472-0 | 49-0 | 492-0 | 493-0 | 512-0 | 519-0 | 522-0 | 523-0 | 531-0 | 534-0 | 547-0 |
| | | Address | 2503 3Rd Avenue W | 2725 Grand Avenue | 403 Callaway Boulevard | 312 Callaway Boulevard | 2512 Island Park Road | 2540 Island Park Road | 2552 Island Park Road | 2556 Island Park Road | 2539 Island Park Road | 2500 Lakeshore Drive | 2529 Western Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **18** | **25** | **86** | **10** | **43** | **6.2** | **46** | **99** | **11** | **6.9** | **45** |
| PFPeA | ng/L | -- | <0.94 U | **4.0** | **1.1 J** | <0.88 U | **20** | <0.88 U | **5.4** | **5.2** | **2.2 J** | <0.92 U | **1.1 J** |
| PFHxA | ng/L | 150,000 | <0.94 U | **3.3 J** | **1.1 J** | <0.88 U | **7.8** | <0.88 U | **4.0** | **4.0** | **2.5 J** | <0.92 U | <0.93 U |
| PFHpA | ng/L | -- | <0.94 U | **3.4 J** | **1.1 J** | <0.88 U | <0.88 U | <0.88 U | **1.5 J** | <0.85 U | **1.2 J** | <0.92 U | <0.93 U |
| PFOA | ng/L | 20 | <0.94 U | **20 B** | **3.5 J** | <0.88 U | **8.4** | **3.9** | **21** | **30** | **6.0 B** | <0.92 U | **14** |
| PFNA | ng/L | 30 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFDA | ng/L | 300 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFUnA | ng/L | 3,000 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFDoA | ng/L | 500 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFTriA | ng/L | -- | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFTeA | ng/L | 10,000 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFHxDA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| PFODA | ng/L | 400,000 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonic Acids** | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **1.3 J** | **3.5 J** | **5.6** | **1.8 J** | **4.2** | **2.4 J** | **3.9** | **6.8** | **1.4 J** | **7.6** | **1.5 J** |
| PFPeS | ng/L | -- | <0.94 U | <0.94 U | **4.0** | **1.4 J** | **0.92 J** | <0.88 U | **1.1 J** | **2.5 J** | <0.89 U | <0.92 U | <0.93 U |
| PFHxS | ng/L | 40 | **2.5 J** | **4.6** | **7.8** | **3.0 J** | **3.4 J** | **1.8 J** | **6.0** | **7.4** | **1.5 J** | **3.0 J** | **3.6 J** |
| PFHpS | ng/L | -- | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFOS | ng/L | 20 | **1.3 J** | **5.8** | **6.9** | **1.6 J** | **9.5** | **3.9** | **5.5** | **10** | **3.5** | **1.8 J** | **13** |
| PFNS | ng/L | -- | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFDS | ng/L | -- | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | <0.93 U |
| PFDoS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 4:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 6:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 8:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 10:2 FTSA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.94 U | <0.94 U | <0.95 U | <0.88 U | <0.88 U | <0.88 U | <0.92 U | <0.85 U | <0.89 U | <0.92 U | **1.0 J** |
| NMeFOSA | ng/L | -- | <3.8 U | <3.8 U | <3.8 U | <3.5 U | <3.5 U | <3.5 U | <3.7 U | <3.4 U | <3.5 U | <3.7 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSAA | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSAA | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NMeFOSE | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| NEtFOSE | ng/L | 20 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Replacement Chemicals** | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| DONA | ng/L | 3,000 | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 9Cl-PF3ONS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.9 U | <1.9 U | <1.9 U | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.9 U |
| **Chemical Sum** | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **1.3** | **25.8** | **10.4** | **1.6** | **17.9** | **7.8** | **26.5** | **40** | **9.5** | **1.8** | **27** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.3** | **25.8** | **10.4** | **1.6** | **17.9** | **7.8** | **26.5** | **40** | **9.5** | **1.8** | **28** |
| **Hazard Index (HI)** | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.1 | 1.4 | 0.7 | 0.2 | 1.0 | 0.4 | 1.5 | 2.2 | 0.5 | 0.2 | 1.5 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Location | 552-0 | 56-0 | 589-0 | 596-0 | 600-32 | 600-8 | 613-0 | 623-0 | 653-0 | 712-1 | 726-0 |
| | | Sample Date | 02/24/21 | 03/23/21 | 04/08/21 | 03/18/21 | 03/09/21 | 03/09/21 | 04/08/21 | 11/19/20 | 03/11/21 | 02/22/21 | 03/01/21 |
| | | Sample Number | 552-0 | 56-0 | 589-0 | 596-0 | 600-32 | 600-8 | 613-0 | 623-0 | 653-0 | 712-1 | 726-0 |
| | | Address | 2536 Lakeshore Drive | 2724 Grand Avenue | 301 Sky Harbour Drive | 201 Sky Harbour Drive | 101 Sky Harbour Drive | 1907 Maryline Court | 212 Hinkley Road | 1820 Bainbridge Street | 1741 Bainbridge Street | 1652 Lakeshore Drive | 1800 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **36** | **15** | **5.5 B** | **4.8** | **8.5** | **2.4 J** | <0.53 U | **1.8 J** | **2.0 J** | **3.8** | **1.7 J** |
| PFPeA | ng/L | -- | **3.4 J** | **3.1 J** | <0.49 U | <0.88 U | **1.5 J** | **0.95 J** | <0.48 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFHxA | ng/L | 150,000 | **1.8 J** | **2.4 J** | <0.62 U | <0.88 U | **1.4 J** | **2.0 J** | <0.61 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFHpA | ng/L | -- | <0.91 U | **1.1 J** | <0.40 U | <0.88 U | **1.1 J** | <0.87 U | <0.40 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFOA | ng/L | 20 | **7.5 B** | **14** | <0.75 U | <0.88 U | **2.9 J** | **1.8 J** | <0.73 U | <0.87 U | **1.1 J** | <0.93 U | <0.83 U |
| PFNA | ng/L | 30 | <0.91 U | <0.87 U | <0.42 U | <0.88 U | <0.87 U | <0.87 U | <0.41 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFDA | ng/L | 300 | <0.91 U | <0.87 U | <0.47 U | <0.88 U | <0.87 U | <0.87 U | <0.46 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFUnA | ng/L | 3,000 | <0.91 U | <0.87 U | <0.56 U | <0.88 U | <0.87 U | <0.87 U | <0.55 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFDoA | ng/L | 500 | <0.91 U | <0.87 U | <0.42 U | <0.88 U | <0.87 U | <0.87 U | <0.42 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFTriA | ng/L | -- | <0.91 U | <0.87 U | <0.48 U | <0.88 U | <0.87 U | <0.87 U | <0.47 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFTeA | ng/L | 10,000 | <0.91 U | <0.87 U | <0.54 U | <0.88 U | <0.87 U | <0.87 U | <0.53 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.7 U | <0.73 U | <1.8 U | <1.7 U | <1.7 U | <0.72 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.7 U | <0.90 U | <1.8 U | <1.7 U | <1.7 U | <0.88 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.8 J** | **2.7 J** | **3.7** | **3.7** | **2.0 J** | **1.2 J** | <0.37 U | <0.87 U | **1.2 J** | **4.0** | **2.1 J** |
| PFPeS | ng/L | -- | <0.91 U | <0.87 U | **0.95 J** | <0.88 U | <0.87 U | <0.87 U | <0.52 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFHxS | ng/L | 40 | **4.2** | **2.9 J** | **4.2** | **1.3 J** | **1.6 J** | **1.0 J** | <0.49 U | **1.5 J** | <0.87 U | **1.4 J** | <0.83 U |
| PFHpS | ng/L | -- | <0.91 U | <0.87 U | <0.45 U | <0.88 U | <0.87 U | <0.87 U | <0.44 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFOS | ng/L | 20 | **4.5** | **5.8** | <1.8 U | <0.88 U | **1.7 J** | <0.87 U | <1.8 U | <0.87 U | **1.5 J** | **2.0 J** | <0.83 U |
| PFNS | ng/L | -- | <0.91 U | <0.87 U | <0.64 U | <0.88 U | <0.87 U | <0.87 U | <0.63 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFDS | ng/L | -- | <0.91 U | <0.87 U | <0.70 U | <0.88 U | <0.87 U | <0.87 U | <0.69 U | <0.87 U | <0.87 U | <0.93 U | <0.83 U |
| PFDoS | ng/L | -- | <1.8 U | <1.7 U | <0.94 U | <1.8 U | <1.7 U | <1.7 U | <0.92 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.7 U | <0.79 U | <1.8 U | <1.7 U | <1.7 U | <0.77 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.7 U | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | **3.5 J** | <1.7 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.7 U | <1.4 U | <1.8 U | <1.7 U | <1.7 U | <1.4 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.7 U | <1.1 U | <1.8 U | <1.7 U | <1.7 U | <1.1 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | **1.8 J** | **1.1 J** | <0.55 U | **1.2 J** | <0.87 U | <0.87 U | **0.62 J** | <0.87 U | **2.7 J** | <0.93 U | <0.83 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.5 U | <1.1 U | <3.5 U | <3.5 U | <3.5 U | <1.1 U | <3.5 U | <3.5 U | <3.7 U | <3.3 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.7 U | <1.2 U | <1.8 U | <1.7 U | <1.7 U | <1.2 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.7 U | <0.84 U | <1.8 U | <1.7 U | <1.7 U | <0.82 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.7 U | <0.67 U | <1.8 U | <1.7 U | <1.7 U | <0.66 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.7 U | <1.2 U | <1.8 U | <1.7 U | <1.7 U | <1.1 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.7 U | <0.86 U | <1.8 U | <1.7 U | <1.7 U | <0.84 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.7 U | <1.9 U | <1.8 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.7 U | <0.43 U | <1.8 U | <1.7 U | <1.7 U | <0.43 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.7 U | <0.43 U | <1.8 U | <1.7 U | <1.7 U | <0.43 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.7 U | <0.60 U | <1.8 U | <1.7 U | <1.7 U | <0.59 U | <1.7 U | <1.7 U | <1.9 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **12** | **19.8** | ND | ND | **4.6** | **1.8** | ND | ND | **2.6** | **2** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **13.8** | **20.9** | ND | **1.2** | **4.6** | **1.8** | **0.62** | ND | **5.3** | **2** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | | | |
| HI | ng/L | 20 | 0.8 | 1.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 79-0 | 83-0 | 84-0 | 85-0 | 86-0 | 87-0 | 88-0 | 89-0 | 91-0 | 92-0 | 94-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 03/09/21 | 03/09/21 | 01/18/21 | 01/26/21 | 01/31/21 | 01/31/21 | 01/28/21 | 02/24/21 | 01/21/21 | 01/21/21 | 01/26/21 |
| | | | Sample Number | 79-0 | 83-0 | 84-0 | 85-0 | 86-0 | 87-0 | 88-0 | 89-0 | 91-0 | 92-0 | 94-0 |
| | | | Address | 2613 Del Ray Avenue | 519 Plainview Road | 307 Plainview Road | 2612 Del Ray Avenue | 2618 Del Ray Avenue | 2620 Del Ray Avenue | 2700 Del Ray Avenue | 2712 Del Ray Avenue | 2726 Del Ray Avenue | 2736 Del Ray Avenue | 2744 Del Ray Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **88** | **96** | **100** | **12** | **10** | **6.9** | **220** | **72** | **64** | **16** | **65** |
| PFPeA | ng/L | -- | **8.1** | **7.7** | **11** | **1.6 J** | <0.93 U | **1.1 J** | **13** | **8.5** | **9.7** | **4.2** | **7.2** |
| PFHxA | ng/L | 150,000 | **4.9** | **5.1** | **7.2** | <0.90 U | <0.93 U | <0.98 U | **7.1** | **7.5** | **5.6** | **4.9** | **4.3** |
| PFHpA | ng/L | -- | **1.0 J** | **1.4 J** | **1.3 J** | <0.90 U | <0.93 U | <0.98 U | **1.2 J** | **1.4 J** | **1.1 J** | **1.5 J** | **1.1 J** |
| PFOA | ng/L | 20 | **37** | **38** | **56** | **6.8** | **1.4 J** | **2.5 J** | **100** | **53 B** | **41** | **9.9** | **30** |
| PFNA | ng/L | 30 | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFDA | ng/L | 300 | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFUnA | ng/L | 3,000 | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFDoA | ng/L | 500 | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFTriA | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFTeA | ng/L | 10,000 | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| **Sulfonic Acids** | | | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **5.0** | **6.1** | **3.7** | **1.2 J** | **2.6 J** | **2.0 J** | **6.2** | **2.7 J** | **3.3 J** | **2.7 J** | **3.5 J** |
| PFPeS | ng/L | -- | **1.5 J** | **1.8 J** | **1.9 J** | <0.90 U | <0.93 U | <0.98 U | **4.0** | **1.5 J** | **1.1 J** | <0.97 U | **1.1 J** |
| PFHxS | ng/L | 40 | **5.3** | **5.5** | **5.9** | **1.9 J** | **3.6 J** | **3.2 J** | **7.5** | **4.7** | **3.9** | **2.0 J** | **4.0** |
| PFHpS | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFOS | ng/L | 20 | **17** | **14** | **21** | **4.2** | **2.6 J** | **4.4** | **30** | **16** | **14** | **5.4** | **9.6** |
| PFNS | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFDS | ng/L | -- | <0.90 U | <0.88 U | <0.89 U | <0.90 U | <0.93 U | <0.98 U | <0.93 U | <0.89 U | <0.92 U | <0.97 U | <0.92 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 6:2 FTSA | ng/L | -- | **2.4 J** | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.90 U | <0.88 U | **1.3 J** | <0.90 U | <0.93 U | <0.98 U | **1.0 J** | <0.89 U | <0.92 U | **1.2 J** | <0.92 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.5 U | <3.5 U | <3.6 U | <3.7 U | <3.9 U | <3.7 U | <3.6 U | <3.7 U | <3.9 U | <3.7 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| **Replacement Chemicals** | | | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.8 U | <1.8 U | <1.9 U | <2.0 U | <1.9 U | <1.8 U | <1.8 U | <1.9 U | <1.8 U |
| **Chemical Sum** | | | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **54** | **52** | **77** | **11** | **4** | **6.9** | **130** | **69** | **55** | **15.3** | **39.6** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **54** | **52** | **78.3** | **11** | **4** | **6.9** | **131** | **69** | **55** | **16.5** | **39.6** |
| **Hazard Index (HI)** | | | | | | | | | | | | | | |
| HI | ng/L | 20 | 2.8 | 2.7 | 4.1 | 0.6 | 0.3 | 0.4 | 6.8 | 3.6 | 2.9 | 0.9 | 2.1 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 4**
**Analytical Results for Samples Collected by OS Group**
Campbell, Wisconsin

| | | | Location | 95-0 | 96-0 | BG122 | BG123 | BG124 | CULLIGANS | MUNICIPAL WELL #26 | WR972 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 01/21/21 | 02/03/21 | 10/28/20 | 10/28/20 | 10/28/20 | 12/17/20 | 03/09/21 | 10/28/20 |
| | | | Sample Number | 95-0 | 96-0 | BG122 | BG123 | BG124 | CULLIGANS_20201217 | MUNICIPAL WELL #26 | WR972 |
| | | | Address | 2742 Del Ray Avenue | 2750 Del Ray Avenue | 2630 Fanta Reed Road | 2630 Fanta Reed Road | 2630 Fanta Reed Road | UNK | 2850 Airport Drive | UNK |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | **37** | **70** | **88** | **57** | **20** | <0.92 U | **19** | <0.87 U |
| PFPeA | ng/L | -- | **6.3** | **7.5** | **49** | **14** | **41** | <0.92 U | <0.85 U | <0.87 U |
| PFHxA | ng/L | 150,000 | **4.0** | **4.6** | **57** | **14** | **41** | <0.92 U | <0.85 U | <0.87 U |
| PFHpA | ng/L | -- | **0.91 J** | **0.95 J** | **21** | **5.3** | **19** | <0.92 U | <0.85 U | <0.87 U |
| PFOA | ng/L | 20 | **23** | **41** | **44** | **11** | **37** | <0.92 U | **3.6** | <0.87 U |
| PFNA | ng/L | 30 | <0.89 U | <0.91 U | **1.6 J** | <0.87 U | **1.1 J** | <0.92 U | <0.85 U | <0.87 U |
| PFDA | ng/L | 300 | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFUnA | ng/L | 3,000 | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFDoA | ng/L | 500 | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFTriA | ng/L | -- | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFTeA | ng/L | 10,000 | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFHxDA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| PFODA | ng/L | 400,000 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.8 J** | **3.5 J** | **37** | **12** | **7.9** | <0.92 U | **9.0** | <0.87 U |
| PFPeS | ng/L | -- | <0.89 U | **1.4 J** | **55** | **10** | **6.9** | <0.92 U | **0.88 J** | <0.87 U |
| PFHxS | ng/L | 40 | **3.5 J** | **4.6** | **460** | **50** | **62** | <0.92 U | **2.0 J** | <0.87 U |
| PFHpS | ng/L | -- | <0.89 U | <0.91 U | **13** | **1.6 J** | **1.9 J** | <0.92 U | <0.85 U | <0.87 U |
| PFOS | ng/L | 20 | **11** | **14** | **360** | **53** | **63** | <0.92 U | **15** | <0.87 U |
| PFNS | ng/L | -- | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFDS | ng/L | -- | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| PFDoS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| 4:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| 6:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | **16** | **3.1 J** | **3.2 J** | <1.8 U | <1.7 U | <1.7 U |
| 8:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | **2.9 J** | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| 10:2 FTSA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | <0.89 U | <0.91 U | <0.86 U | <0.87 U | <0.87 U | <0.92 U | <0.85 U | <0.87 U |
| NMeFOSA | ng/L | -- | <3.6 U | <3.6 U | <3.4 U | <3.5 U | <3.5 U | <3.7 U | <3.4 U | <3.5 U |
| NEtFOSA | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| NMeFOSAA | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| NEtFOSAA | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| NMeFOSE | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| NEtFOSE | ng/L | 20 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| DONA | ng/L | 3,000 | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| 9Cl-PF3ONS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| 11Cl-PF3OUdS | ng/L | -- | <1.8 U | <1.8 U | <1.7 U | <1.7 U | <1.7 U | <1.8 U | <1.7 U | <1.7 U |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **34** | **55** | **404** | **64** | **100** | ND | **18.6** | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **34** | **55** | **404** | **64** | **100** | ND | **18.6** | ND |
| **Hazard Index (HI)** | | | | | | | | | | | |
| HI | ng/L | 20 | 1.8 | 2.9 | 31.8 | 4.5 | 6.6 | 0.0 | 1.0 | 0.0 |

**Notes:**

Data presented in this table are lab results shared by OS Group to DNR and Wood.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

UNK = Unknown sample location

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

**Table 5**
**Analytical Results for Samples Collected by Independent Private Residents**
Campbell, Wisconsin

| | | | Location | 13-0 | 27-0 | 72-0 | 123-5 | 430-0 | 441-0 | 480-0 | 490-0 | 491-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Address | 617 Plainview Road | 610 Sanborn Street | 2713 Grand Street | 1901 Caroline Street | 2625 Hibbard Court | 2525 Grand Street | 431 Central Road | 412 Central Road | 416 Central Road |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | | NA | NA | NA | NA | **0** | NA | NA | NA | **27.2** |
| PFPeA | ng/L | -- | | **1.39** | NA | <0.321 | NA | NA | NA | NA | NA | **0.938** |
| PFHxA | ng/L | 150,000 | | **1.69** | **6.25** | **0.766 F** | <2.0 | **1.1** | **1.13 J** | <1.1 | <1.4 | <1.08 |
| PFHpA | ng/L | -- | | **0.489 J** | **1.36 J** | <0.427 | <2.0 | **0** | <0.74 | <0.74 | <1.1 | **0.847** |
| PFOA | ng/L | 20 | | **4.89** | **55** | **10.2** | **2.8** | **11.2** | **10.4** | **2.09 J** | **19.9** | **4.32** |
| PFNA | ng/L | 30 | | <0.413 | <0.96 | <0.391 | <2.0 | **0** | <0.87 | <0.87 | <0.96 | **0.541** |
| PFDA | ng/L | 300 | | <0.376 | <0.62 | <0.356 | <2.0 | **0** | <0.65 | <0.65 | <0.62 | **0.862** |
| PFUnA | ng/L | 3,000 | | <0.389 | <0.76 | <0.369 | <2.0 | **0** | <0.99 | <0.99 | <0.76 | <1.29 |
| PFDoA | ng/L | 500 | | <0.367 | <1.1 | <0.348 | <2.0 | **0** | <0.88 | <0.88 | <1.1 | **0.751** |
| PFTriA | ng/L | -- | | <0.383 | <1.1 | <0.363 | <2.0 | **0** | <0.69 | <0.69 | <1.1 | **1.06** |
| PFTeA | ng/L | 10,000 | | <0.339 | <1.2 | <0.321 | <2.0 | NA | <0.85 | <0.85 | <1.2 | **0.78** |
| PFHxDA | ng/L | -- | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PFODA | ng/L | 400,000 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | | **5.9** | **11.4** | **6.96** | <2.0 | **2.3** | **1.81** | <0.51 | **7.54** | **0.747 J** |
| PFPeS | ng/L | -- | | **0.488** | NA | **1.02** | NA | NA | NA | NA | NA | **0.866** |
| PFHxS | ng/L | 40 | | **4.41** | **4.93** | **3.26** | <2.0 | **4.4** | **5.1** | **2.29 J** | **14.8** | **1.71** |
| PFHpS | ng/L | -- | | <0.383 | NA | <0.363 | NA | NA | NA | NA | NA | <2.36 |
| PFOS | ng/L | 20 | | **5.96** | **24.2** | **14.9** | <2.0 | **5.8** | **8.75** | **1.47 J** | **15.2** | **1.4** |
| PFNS | ng/L | -- | | <0.478 | NA | <0.453 | NA | NA | NA | NA | NA | **1.35** |
| PFDS | ng/L | -- | | <0.436 | NA | **0.743 F** | NA | NA | NA | NA | NA | **2.59** |
| PFDoS | ng/L | -- | | <0.495 | NA | <0.469 | NA | NA | NA | NA | NA | <1.52 |
| 4:2 FTSA | ng/L | -- | | <0.432 | NA | <0.409 | NA | NA | NA | NA | NA | **1.03 J** |
| 6:2 FTSA | ng/L | -- | | <0.489 | NA | <0.464 | NA | NA | NA | NA | NA | <0.924 |
| 8:2 FTSA | ng/L | -- | | <0.427 | NA | <0.405 | NA | NA | NA | NA | NA | <2.14 |
| 10:2 FTSA | ng/L | -- | | <0.415 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | | <3.89 | NA | <3.69 | NA | NA | NA | NA | NA | <1.29 |
| NMeFOSA | ng/L | -- | | <0.769 | NA | <0.729 | NA | NA | NA | NA | NA | <6.56 |
| NEtFOSA | ng/L | 20 | | <0.630 | NA | <0.597 | NA | NA | NA | NA | NA | <6.99 |
| NMeFOSAA | ng/L | -- | | <0.513 | <0.55 | <0.486 | <2.0 | **0** | <0.76 | <0.5 | <0.55 | <0.905 |
| NEtFOSAA | ng/L | 20 | | <0.410 | <0.60 | <0.389 | <2.0 | **0** | <0.83 | <0.76 | <0.60 | <2.43 |
| NMeFOSE | ng/L | -- | | <0.387 | NA | <0.367 | NA | NA | NA | NA | NA | **7.66** |
| NEtFOSE | ng/L | 20 | | <0.395 | NA | <0.374 | NA | NA | NA | NA | NA | <5.31 |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | | <0.505 | <1.3 | <0.478 | <2.0 | **0** | <0.83 | <0.83 | <1.3 | <0.594 |
| DONA | ng/L | 3,000 | | <0.402 | <0.73 | <0.381 | <2.0 | NA | <0.82 | <0.82 | <0.73 | <0.814 |
| 9Cl-PF3ONS | ng/L | -- | | <0.401 | <0.83 | <0.381 | <2.0 | NA | **1.15 J** | <0.75 | <0.83 | <0.795 |
| 11Cl-PF3OUdS | ng/L | -- | | NA | <0.77 | <0.357 | <2.0 | NA | <0.88 | <0.88 | <0.77 | <0.408 |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | | **10.85** | **79.2** | **25.1** | **2.8** | **17** | **19.15** | **3.56** | **35.1** | **5.72** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | | **10.85** | **79.2** | **25.1** | **2.8** | **17** | **19.15** | **3.56** | **35.1** | **5.72** |

**Notes:**

Data presented in this table were provided to DNR and Wood by private residents. Results have not been validated.

Analytical laboratories, analytical methods, and analyte lists varied by sample. Hazard Index was not calculated for these samples.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

NA = Not Applicable, sample not analyzed for PFAS Parameter

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

**Table 5**
**Analytical Results for Samples Collected by Independent Private Residents**
Campbell, Wisconsin

| | | | Location | 499-0 | 508-0 | 544-0 | 554-0 | 569-1 | 695-0 | 737-0 | 1177-0 | 1191-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Address | 2428 Lakeshore Drive | 2500 Western Avenue | 2520 Lakeshore Drive | 2548 Lakeshore Drive | 2219 Bainbridge Street | 3061 Edgewater Lane | 1731 Bainbridge Street | 1836 Nakomis Avenue | 1924 Nakomis Avenue |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | | NA | NA | **108** | **142** | NA | NA | **6.44 F** | NA | NA |
| PFPeA | ng/L | -- | | **0.416** | NA | **0.719 F** | **3.63** | **0.537** | NA | **1.52** | <0.355 | <0.359 |
| PFHxA | ng/L | 150,000 | | **0.5 F** | **1.9** | **0.441 F** | **3.53** | **0.673 J** | <1.1 | **2.36** | <0.419 | <0.425 |
| PFHpA | ng/L | -- | | <0.450 | <0.907 | <0.0993 | **1.12** | <0.448 | <0.74 | **0.945 F** | <0.472 | <0.478 |
| PFOA | ng/L | 20 | | **3.26** | **5** | **12.9** | **12.8** | **1.96** | <0.66 | **2.05** | <0.460 | <0.466 |
| PFNA | ng/L | 30 | | <0.412 | <0.907 | <0.149 | <0.401 | <0.411 | <0.87 | <0.150 | <0.432 | <0.438 |
| PFDA | ng/L | 300 | | <0.375 | <0.907 | <0.144 | <0.365 | <0.374 | <0.65 | <0.145 | <0.394 | <0.399 |
| PFUnA | ng/L | 3,000 | | <0.388 | <0.907 | <0.180 | <0.378 | <0.387 | <0.99 | <0.181 | <0.407 | <0.413 |
| PFDoA | ng/L | 500 | | <0.366 | <0.907 | <0.245 | <0.357 | <0.366 | <0.88 | <0.246 | <0.385 | <0.390 |
| PFTriA | ng/L | -- | | <0.382 | <0.907 | <0.235 | <0.372 | <0.382 | <0.69 | <0.236 | <0.401 | <0.407 |
| PFTeA | ng/L | 10,000 | | <0.338 | <0.907 | <0.473 | <0.329 | <0.337 | <0.85 | <0.475 | <0.355 | <0.359 |
| PFHxDA | ng/L | -- | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PFODA | ng/L | 400,000 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Sulfonic Acids** | | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | | **1.36** | **4.82** | **3.46** | **3.02** | **0.833 J** | **1.5 J** | **7.14** | <0.439 | <0.445 |
| PFPeS | ng/L | -- | | <0.259 | NA | **1.62** | **1.04** | <0.258 | NA | **0.236 F** | <0.272 | <0.275 |
| PFHxS | ng/L | 40 | | **2.03** | **4.3** | **5.69** | **6.25** | **1.32** | <0.82 | **2.08** | <0.410 | <0.416 |
| PFHpS | ng/L | -- | | <0.382 | NA | **0.282 F** | <0.371 | <0.381 | NA | <0.107 | <0.400 | <0.406 |
| PFOS | ng/L | 20 | | <0.324 | **7.3** | **11.5** | **13.3** | **1.14** | **3.73** | **1.83** | <0.340 | <0.344 |
| PFNS | ng/L | -- | | <0.477 | NA | <0.182 | <0.464 | <0.476 | NA | <0.183 | <0.501 | <0.507 |
| PFDS | ng/L | -- | | <0.434 | NA | <0.189 | <0.423 | <0.433 | NA | <0.190 | <0.456 | <0.462 |
| PFDoS | ng/L | -- | | <0.494 | NA | <0.857 | <0.481 | <0.493 | NA | <0.861 | <0.518 | <0.525 |
| 4:2 FTSA | ng/L | -- | | <0.431 | NA | <0.211 | <0.419 | <0.430 | NA | <0.212 | <0.452 | <0.458 |
| 6:2 FTSA | ng/L | -- | | <0.488 | NA | <0.159 | <0.475 | <0.487 | NA | <0.160 | <0.513 | <0.519 |
| 8:2 FTSA | ng/L | -- | | <0.426 | NA | <0.127 | <0.415 | <0.425 | NA | <0.127 | <0.447 | <0.453 |
| 10:2 FTSA | ng/L | -- | | NA | NA | NA | <0.403 | <0.413 | NA | NA | NA | <0.440 |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | | |
| FOSA | ng/L | 20 | | <3.88 | NA | <0.835 | <3.78 | <3.87 | NA | <0.839 | <4.07 | <4.13 |
| NMeFOSA | ng/L | -- | | <0.767 | NA | <0.445 | <0.746 | <0.765 | NA | <0.447 | <0.805 | <0.815 |
| NEtFOSA | ng/L | 20 | | <0.628 | NA | <0.302 | <0.611 | <0.627 | NA | <0.303 | <0.659 | <0.688 |
| NMeFOSAA | ng/L | -- | | <0.512 | <0.907 | <0.187 | <0.498 | <0.511 | <0.50 | <0.188 | <0.537 | <0.544 |
| NEtFOSAA | ng/L | 20 | | <0.409 | <0.907 | <0.283 | <0.398 | <0.408 | <0.76 | <0.285 | <0.429 | <0.435 |
| NMeFOSE | ng/L | -- | | <0.386 | NA | <0.413 | **0.715 J** | <0.385 | NA | <0.415 | <0.405 | <0.411 |
| NEtFOSE | ng/L | 20 | | <0.394 | NA | <0.469 | <0.383 | <0.393 | NA | <0.471 | <0.413 | <0.419 |
| **Replacement Chemicals** | | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | | <0.503 | <0.907 | <0.140 | <0.490 | <0.502 | <0.83 | <0.141 | <0.528 | <0.535 |
| DONA | ng/L | 3,000 | | <0.401 | <0.907 | <0.0974 | <0.391 | <0.400 | <0.82 | <0.0978 | <0.421 | <0.427 |
| 9Cl-PF3ONS | ng/L | -- | | <0.400 | <0.907 | <0.137 | <0.390 | <0.400 | <0.75 | <0.138 | <0.420 | <0.426 |
| 11Cl-PF3OUdS | ng/L | -- | | <0.376 | <0.907 | <0.136 | <0.366 | <0.375 | <0.88 | <0.136 | <0.395 | <0.400 |
| **Chemical Sum** | | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | | **3.26** | **12.3** | **24.4** | **26.1** | **3.1** | **3.73** | **3.88** | ND | ND |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | | **3.26** | **12.3** | **24.4** | **26.1** | **3.1** | **3.73** | **3.88** | ND | ND |

**Notes:**

Data presented in this table were provided to DNR and Wood by private residents. Results have not been validated.

Analytical laboratories, analytical methods, and analyte lists varied by sample. Hazard Index was not calculated for the PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

NA = Not Applicable, sample not analyzed for PFAS Parameter

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

**Table 5**
**Analytical Results for Samples Collected by Independent Private Residents**
Campbell, Wisconsin

| | | Location | 1533-3 | 1546-2 | 1556-6 | 1556-6 | 1580-2 | 1629-0 | 1871-1 | 1924-10 | 1924-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Address | 2930 Bayshore Drive | 2929 Bayshore Drive | 921 Plainview Road-4/26 | 921 Plainview Road-12/14 | 815 Plainview | 715 Kime Street | 3136 Howry Avenue | 2431 Lakeshore Drive | 2501 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | NA | **12.5** | **21** | NA | NA | **8.76** | NA | NA | **21** |
| PFPeA | ng/L | -- | <0.326 | **0.797 F** | <2.0 | <0.328 | NA | <0.85 | NA | NA | **2.5 J** |
| PFHxA | ng/L | 150,000 | <0.386 | **0.951 F** | <2.0 | <0.388 | **1.12** | <0.94 | <2 | **1.34 J** | **3.1 J** |
| PFHpA | ng/L | -- | <0.434 | **0.607 F** | <2.0 | <0.436 | <0.947 | <1.0 | <2 | <0.74 | <1.0 |
| PFOA | ng/L | 20 | <0.423 | **1.83** | <2.0 | **0.917** | **1.9** | <0.75 | <2 | **17.5** | **7.8** |
| PFNA | ng/L | 30 | <0.398 | **0.405 F** | <2.0 | **0.472 J** | <0.947 | <0.93 | <2 | <0.87 | <1.0 |
| PFDA | ng/L | 300 | <0.362 | <0.145 | <2.0 | **0.403 J** | <0.947 | <1.4 | <2 | <0.65 | <1.0 |
| PFUnA | ng/L | 3,000 | <0.375 | <0.182 | <2.0 | <0.377 | <0.947 | <1.8 | <2 | <0.99 | <1.0 |
| PFDoA | ng/L | 500 | <0.354 | <0.247 | <2.0 | <0.356 | <0.947 | <1.7 | <2 | <0.88 | <1.0 |
| PFTriA | ng/L | -- | <0.369 | <0.237 | NA | <0.371 | <0.947 | <1.7 | <2 | <0.69 | <1.0 |
| PFTeA | ng/L | 10,000 | <0.326 | <0.478 | <2.0 | <0.328 | <0.947 | <1.2 | <2 | <0.85 | <1.0 |
| PFHxDA | ng/L | -- | NA | NA | <2.0 | NA | NA | NA | NA | NA | <2.1 |
| PFODA | ng/L | 400,000 | NA | NA | NA | NA | NA | NA | NA | NA | <2.1 |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **0.655 J** | **0.934 F** | **2.2** | **2.49** | **4.49** | **1.68 J** | **0.96 J** | **2.27** | **24** |
| PFPeS | ng/L | -- | <0.250 | <0.0815 | <2.0 | **0.358 J** | NA | <0.86 | NA | NA | <1.0 |
| PFHxS | ng/L | 40 | <0.377 | **0.503 F** | **2.9** | **1.71** | **1.94** | <0.92 | **0.55 J** | **3.91** | **3.3 J** |
| PFHpS | ng/L | -- | <0.368 | <0.108 | <2.0 | <0.370 | NA | <0.73 | NA | NA | <1.0 |
| PFOS | ng/L | 20 | **1.03** | **2.03** | **5.3** | **3.82** | **5.12** | **3.01 J** | **3.4 J** | **6.11** | **3.6 J** |
| PFNS | ng/L | -- | <0.460 | <0.184 | <2.0 | <0.463 | NA | <0.63 | NA | NA | <1.0 |
| PFDS | ng/L | -- | <0.419 | <0.191 | <2.0 | <0.422 | NA | <0.62 | NA | NA | <1.0 |
| PFDoS | ng/L | -- | <0.477 | <0.865 | <2.0 | <0.479 | NA | <1.3 | NA | NA | <2.1 |
| 4:2 FTSA | ng/L | -- | <0.416 | <0.213 | <2.0 | <0.418 | NA | <1.3 | NA | NA | <2.1 |
| 6:2 FTSA | ng/L | -- | <0.471 | <0.161 | <2.0 | <0.474 | NA | <1.7 | NA | NA | **3.7 J** |
| 8:2 FTSA | ng/L | -- | <0.411 | <0.128 | <2.0 | <0.413 | NA | <1.5 | NA | NA | <2.1 |
| 10:2 FTSA | ng/L | -- | NA | NA | <2.0 | <0.402 | NA | NA | NA | NA | <2.1 |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | <3.75 | <0.843 | <2.0 | **4.72** | NA | <0.97 | NA | NA | **1.4 J** |
| NMeFOSA | ng/L | -- | <0.740 | <0.449 | <2.0 | <0.744 | NA | <1.2 | NA | NA | <4.1 |
| NEtFOSA | ng/L | 20 | <0.606 | <0.304 | <2.0 | <0.610 | NA | <1.0 | NA | NA | <2.1 |
| NMeFOSAA | ng/L | -- | <0.494 | <0.189 | <2.0 | <0.497 | <0.947 | <1.1 | NA | <0.50 | <2.1 |
| NEtFOSAA | ng/L | 20 | <0.395 | <0.286 | <2.0 | <0.397 | <0.947 | <1.7 | NA | <0.76 | <2.1 |
| NMeFOSE | ng/L | -- | <0.373 | <0.417 | <2.0 | <0.375 | NA | <1.4 | NA | NA | <2.1 |
| NEtFOSE | ng/L | 20 | <0.380 | <0.473 | <2.0 | <0.382 | NA | <1.0 | NA | NA | <2.1 |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <0.486 | <0.142 | <5.0 | <0.489 | <0.947 | <0.72 | <2 | <0.83 | <2.1 |
| DONA | ng/L | 3,000 | <0.387 | <0.0982 | <2.0 | <0.390 | <0.947 | <0.73 | <2 | <0.82 | <2.1 |
| 9Cl-PF3ONS | ng/L | -- | <0.387 | <0.139 | <2.0 | <0.389 | <0.947 | <0.83 | <2 | <0.75 | <2.1 |
| 11Cl-PF3OUdS | ng/L | -- | <0.363 | <0.137 | <2.0 | <0.365 | <0.947 | <1.1 | <2 | <0.88 | <2.1 |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **1.03** | **3.86** | **5.3** | **4.737** | **7.02** | **3.01** | **3.4** | **23.61** | **11.4** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **1.03** | **3.86** | **5.3** | **9.457** | **7.02** | **3.01** | **3.4** | **23.61** | **12.8** |

**Notes:**

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Analytical laboratories, analytical methods, and analyte lists varied by sample. Hazard Index was not calculated for the PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

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Results exceeding the Recommended Enforcement Standard are highlighted

NA = Not Applicable, sample not analyzed for PFAS Parameter

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

**Table 5**
**Analytical Results for Samples Collected by Independent Private Residents**
Campbell, Wisconsin

| | | Location | 2013-0 | 2019-0 | 2070-0 | 2140-0 | 2141-0 | 2143-0 | 2222-0 | 2228-0 | 2318-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Address | 813 Kelly Place | 806 Lori Place | 703 Fanta Reed Road | 2624 Baumgartner Drive | 2626 Baumgartner Drive | 909 Susan Place | 2619 Thomas Street | 814 Plainview Road | 2633 Lakeshore Drive |
| **Chemical Name** | **Units** | **Enforcement Standard** | | | | | | | | | |
| **Carboxylic Acids** | | | | | | | | | | | |
| PFBA | ng/L | 10,000 | NA | NA | NA | NA | NA | NA | **17 B** | NA | NA |
| PFPeA | ng/L | -- | NA | <0.344 | **2.26** | NA | NA | **1.12** | **0.85 J** | NA | NA |
| PFHxA | ng/L | 150,000 | <0.41 | <0.406 | **1.63** | NA | NA | **0.807 J** | **1.0 J** | <2.0 | **2.53** |
| PFHpA | ng/L | -- | <0.34 | <0.457 | <0.454 | NA | NA | <0.444 | **0.5 J** | <2.0 | <0.973 |
| PFOA | ng/L | 20 | **0.66 J** | **1.72** | **17.2** | **1.3** | **1.6** | **7.12** | **3.5 J** | **2.5** | **35.8** |
| PFNA | ng/L | 30 | **0.58 J** | <0.419 | <0.416 | NA | NA | <0.407 | <0.46 | <2.0 | <0.973 |
| PFDA | ng/L | 300 | <0.62 | <0.381 | <0.379 | NA | NA | <0.370 | <0.52 | <2.0 | <0.973 |
| PFUnA | ng/L | 3,000 | <0.76 | <0.395 | <0.392 | NA | NA | <0.383 | <0.62 | <2.0 | <0.973 |
| PFDoA | ng/L | 500 | <0.27 | <0.373 | <0.370 | NA | NA | <0.362 | <0.47 | <2.0 | <0.973 |
| PFTriA | ng/L | -- | <0.35 | <0.389 | <0.386 | NA | NA | <0.378 | <0.52 | <2.0 | <0.973 |
| PFTeA | ng/L | 10,000 | <0.24 | <0.344 | <0.342 | NA | NA | <0.334 | <0.59 | <2.0 | <0.973 |
| PFHxDA | ng/L | -- | NA | NA | NA | NA | NA | NA | <0.81 | NA | NA |
| PFODA | ng/L | 400,000 | NA | NA | NA | NA | NA | NA | <0.99 | NA | NA |
| **Sulfonic Acids** | | | | | | | | | | | |
| PFBS | ng/L | 450,000 | **2.2** | **4.32** | **4.74** | NA | NA | **6.65** | **6.7** | **5.3** | **4.5** |
| PFPeS | ng/L | -- | NA | <0.263 | **0.604** | NA | NA | **0.394** | **0.85 J** | NA | NA |
| PFHxS | ng/L | 40 | **1.23 J** | **1.79** | **2.41** | NA | NA | **1.95** | **2.2 J** | **2.4** | **4.27** |
| PFHpS | ng/L | -- | NA | <0.388 | <0.386 | NA | NA | <0.377 | <0.49 | NA | NA |
| PFOS | ng/L | 20 | **7.98** | **7.96** | **6.72** | **5.7** | **8.4** | **3.99** | **14** | **8.9** | **20** |
| PFNS | ng/L | -- | NA | <0.485 | <0.482 | NA | NA | <0.471 | <0.71 | NA | NA |
| PFDS | ng/L | -- | NA | <0.442 | <0.439 | NA | NA | <0.429 | <0.77 | NA | NA |
| PFDoS | ng/L | -- | NA | <0.502 | <0.499 | NA | NA | <0.488 | <1.0 | NA | NA |
| 4:2 FTSA | ng/L | -- | NA | <0.438 | <0.435 | NA | NA | <0.425 | <0.87 | NA | NA |
| 6:2 FTSA | ng/L | -- | NA | <0.496 | <0.493 | NA | NA | <0.482 | <2.0 | NA | NA |
| 8:2 FTSA | ng/L | -- | NA | <0.433 | <0.430 | NA | NA | <0.421 | <1.6 | NA | NA |
| 10:2 FTSA | ng/L | -- | NA | NA | NA | NA | NA | NA | <1.2 | NA | NA |
| **Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols** | | | | | | | | | | | |
| FOSA | ng/L | 20 | NA | <3.95 | <3.92 | NA | NA | <3.83 | **1.1 J** | NA | NA |
| NMeFOSA | ng/L | -- | NA | <0.780 | <0.775 | NA | NA | <0.757 | <1.3 | NA | NA |
| NEtFOSA | ng/L | 20 | NA | <0.639 | <0.635 | NA | NA | <0.620 | <1.3 | NA | NA |
| NMeFOSAA | ng/L | -- | <0.55 | <0.520 | <0.517 | NA | NA | <0.505 | <0.92 | <2.0 | <0.973 |
| NEtFOSAA | ng/L | 20 | <0.60 | <0.416 | <0.413 | NA | NA | <0.404 | <0.74 | <2.0 | <0.973 |
| NMeFOSE | ng/L | -- | NA | <0.393 | <0.390 | NA | NA | <0.381 | <1.3 | NA | NA |
| NEtFOSE | ng/L | 20 | NA | <0.400 | <0.398 | NA | NA | <0.389 | <0.95 | NA | NA |
| **Replacement Chemicals** | | | | | | | | | | | |
| HFPO-DA | ng/L | 300 | <1.3 | <0.512 | <0.509 | NA | NA | <0.497 | <2.1 | <2.0 | <0.973 |
| DONA | ng/L | 3,000 | <0.21 | <0.408 | <0.406 | NA | NA | <0.396 | <0.48 | <2.0 | <0.973 |
| 9Cl-PF3ONS | ng/L | -- | <0.19 | <0.407 | <0.405 | NA | NA | <0.395 | <0.48 | <2.0 | <0.973 |
| 11Cl-PF3OUdS | ng/L | -- | <0.14 | <0.382 | <0.380 | NA | NA | <0.371 | <0.66 | <2.0 | <0.973 |
| **Chemical Sum** | | | | | | | | | | | |
| PFOS+PFOA | ng/L | 20 | **8.64** | **9.68** | **23.92** | **7** | **10** | **11.11** | **17.5** | **11.4** | **55.8** |
| FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA | ng/L | 20 | **8.64** | **9.68** | **23.92** | **7** | **10** | **11.11** | **17.5** | **11.4** | **55.8** |

**Notes:**

Data presented in this table were provided to DNR and Wood by private residents. Results have not been validated.

Analytical laboratories, analytical methods, and analyte lists varied by sample. Hazard Index was not calculated for the PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

NA = Not Applicable, sample not analyzed for PFAS Parameter

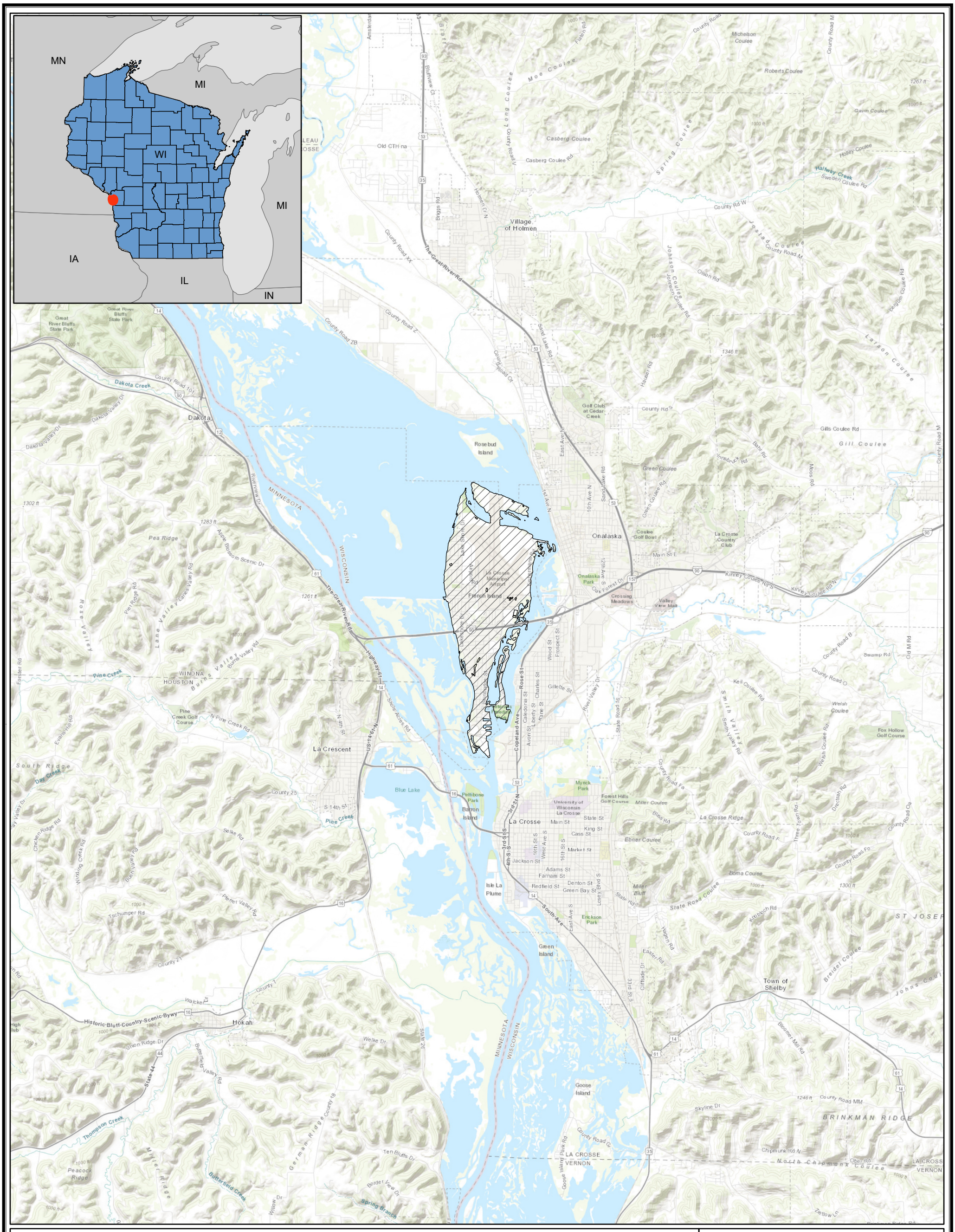
Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

# FIGURES




## Legend

French Island Boundary

# AREA LOCATION MAP

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

9,000 0 9,000
Feet
1:100,000

Date: 04/09/2021
Drawn: KMC
Checked: EMT

Project No. 3651210173

wood.

Figure: 1

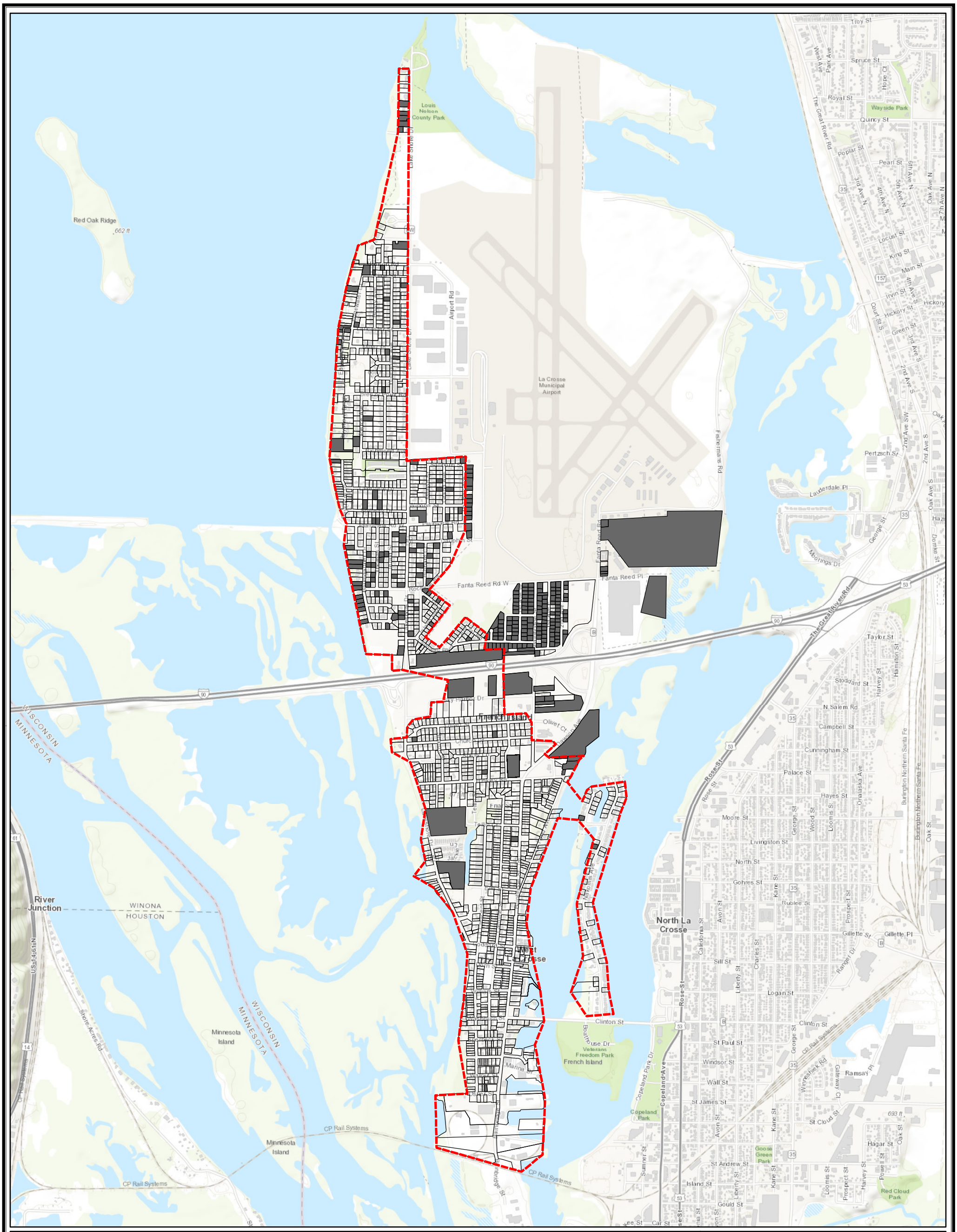

Red Oak Ridge
662 ft
Louis Nelson County Park
Lake Shore Dr
Airport Rd
La Crosse Municipal Airport
Fisherman's Rd
Fanta Reed Rd
Fanta Reed Rd W
Fanta Reed Pl
Troy St
West Ave
Park Ave
Spruce St
Hope Ct
Royal St
Wayside Park
Quincy St
The Great River Rd
Poplar St
Pearl St
3rd Ave N
4th Ave N
5th Ave N
6th Ave N
Oak Ave N
7th Ave N
Locust St
King St
Main St
Irvin St
Hickory St
Court St S
Green St
3rd Ave S
2nd Ave S
Pertzsch St
Lauderdale Pl
George St
Moorings Dr
Taylor St
Hamilton St
Harvey St
Stoddard St
N Salem Rd
Campbell St
Cunningham St
Palace St
Hayes St
Onalaska Ave
Burlington Northern Santa Fe
Rose St
Moore St
George St
Wood St
Loomis St
Livingston St
North St
Gohres St
Kane St
Rublee St
Prospect St
Avon St
Caledonia St
Gillette St
Gillette Pl
Sill St
Charles St
Ranger Dr
Logan St
Clinton St
CP Rail Systems
Boathouse Dr
Veterans Freedom Park
French Island
Marina Dr
Copeland Park Dr
Copeland Ave
Copeland Park
Windsor St
St Paul St
Winneshiek Rd
Gateway Ct
Ramsay Pl
Wall St
St James St
St Cloud St
693 ft
Hagar St
Oak St
Goose Green Park
St Andrew St
Island St
Gould St
Summer St
Cass St
Powell St
Red Cloud Park
Olivet Ch
Olivet Cir
Church St
Trinity Rd
Tamarack Rd
Tamarack Ln
Cedar Ln
Juniper Ln
Fir Ln
Spruce Ln
Hemlock Ln
Aspen Ln
Willow Ln
Maple Ln
Oak Ln
Elm Ln
Ash Ln
Birch Ln
Pine Ln
Cherry Ln
Apple Ln
Peach Ln
Plum Ln
Pear Ln
Grape Ln
Berry Ln
Nut Ln
Seed Ln
Root Ln
Stem Ln
Leaf Ln
Flower Ln
Fruit Ln
Vine Ln
Bush Ln
Tree Ln
Forest Ln
Woods Ln
Meadow Ln
Field Ln
Pasture Ln
Barn Ln
Silo Ln
Coop Ln
Pen Ln
Stable Ln
Corral Ln
Fence Ln
Gate Ln
Path Ln
Trail Ln
Road Ln
Street Ln
Avenue Ln
Boulevard Ln
Drive Ln
Court Ln
Place Ln
Terrace Ln
Circle Ln
Square Ln
Park Ln
Garden Ln
Yard Ln
House Ln
Home Ln
Cabin Ln
Shed Ln
Garage Ln
Workshop Ln
Studio Ln
Office Ln
Store Ln
Shop Ln
Market Ln
Mall Ln
Plaza Ln
Center Ln
Building Ln
Tower Ln
Bridge Ln
Tunnel Ln
Dam Ln
Lock Ln
Canal Ln
River Ln
Lake Ln
Pond Ln
Stream Ln
Creek Ln
Brook Ln
Waterfall Ln
Spring Ln
Well Ln
Pump Ln
Tank Ln
Pipe Ln
Valve Ln
Meter Ln
Gauge Ln
Sensor Ln
Switch Ln
Light Ln
Lamp Ln
Bulb Ln
Wire Ln
Cable Ln
Plug Ln
Socket Ln
Battery Ln
Generator Ln
Motor Ln
Engine Ln
Transmission Ln
Axle Ln
Wheel Ln
Tire Ln
Brake Ln
Steering Ln
Suspension Ln
Frame Ln
Body Ln
Paint Ln
Rust Ln
Corrosion Ln
Repair Ln
Maintenance Ln
Inspection Ln
Testing Ln
Calibration Ln
Adjustment Ln
Replacement Ln
Upgrade Ln
Modification Ln
Customization Ln
Design Ln
Engineering Ln
Manufacturing Ln
Assembly Ln
Quality Ln
Control Ln
Safety Ln
Regulation Ln
Standard Ln
Specification Ln
Requirement Ln
Test Ln
Certification Ln
Approval Ln
Permit Ln
License Ln
Insurance Ln
Warranty Ln
Guarantee Ln
Liability Ln
Risk Ln
Hazard Ln
Emergency Ln
Response Ln
Recovery Ln
Prevention Ln
Mitigation Ln
Preparedness Ln
Training Ln
Education Ln
Awareness Ln
Communication Ln
Coordination Ln
Collaboration Ln
Partnership Ln
Agreement Ln
Contract Ln
Negotiation Ln
Mediation Ln
Arbitration Ln
Litigation Ln
Settlement Ln
Judgment Ln
Appeal Ln
Enforcement Ln
Compliance Ln
Violation Ln
Penalty Ln
Fine Ln
Sanction Ln
Remedy Ln
Restitution Ln
Damages Ln
Compensation Ln
Reimbursement Ln
Refund Ln
Credit Ln
Debit Ln
Payment Ln
Invoice Ln
Receipt Ln
Budget Ln
Expense Ln
Revenue Ln
Profit Ln
Loss Ln
Tax Ln
Fee Ln
Charge Ln
Rate Ln
Price Ln
Cost Ln
Value Ln
Worth Ln
Asset Ln
Liability Ln
Equity Ln
Debt Ln
Loan Ln
Mortgage Ln
Interest Ln
Principal Ln
Amortization Ln
Depreciation Ln
Appreciation Ln
Inflation Ln
Deflation Ln
Recession Ln
Depression Ln
Boom Ln
Bust Ln
Cycle Ln
Trend Ln
Forecast Ln
Prediction Ln
Projection Ln
Estimate Ln
Guess Ln
Hypothesis Ln
Theory Ln
Model Ln
Simulation Ln
Experiment Ln
Observation Ln
Measurement Ln
Data Ln
Information Ln
Knowledge Ln
Wisdom Ln
Understanding Ln
Insight Ln
Intuition Ln
Creativity Ln
Innovation Ln
Invention Ln
Discovery Ln
Exploration Ln
Adventure Ln
Journey Ln
Quest Ln
Mission Ln
Purpose Ln
Goal Ln
Objective Ln
Strategy Ln
Tactic Ln
Plan Ln
Schedule Ln
Timeline Ln
Deadline Ln
Milestone Ln
Progress Ln
Success Ln
Failure Ln
Lesson Ln
Experience Ln
Memory Ln
History Ln
Future Ln
Present Ln
Past Ln
Time Ln
Space Ln
Universe Ln
Reality Ln
Existence Ln
Life Ln
Death Ln
Afterlife Ln
Soul Ln
Spirit Ln
Mind Ln
Body Ln
Consciousness Ln
Unconsciousness Ln
Dream Ln
Nightmare Ln
Sleep Ln
Wake Ln
Rest Ln
Work Ln
Play Ln
Leisure Ln
Hobby Ln
Interest Ln
Passion Ln
Love Ln
Hate Ln
Fear Ln
Anger Ln
Joy Ln
Sadness Ln
Surprise Ln
Disgust Ln
Trust Ln
Anticipation Ln
Empathy Ln
Sympathy Ln
Compassion Ln
Kindness Ln
Cruelty Ln
Violence Ln
Peace Ln
War Ln
Conflict Ln
Resolution Ln
Negotiation Ln
Diplomacy Ln
Politics Ln
Government Ln
Law Ln
Justice Ln
Crime Ln
Punishment Ln
Rehabilitation Ln
Prison Ln
Police Ln
Military Ln
Army Ln
Navy Ln
Air Force Ln
Marines Ln
Coast Guard Ln
National Guard Ln
Reserves Ln
Veterans Ln
Soldiers Ln
Sailors Ln
Airmen Ln
Marines Ln
Coast Guardsmen Ln
National Guardsmen Ln
Reservists

Figure 3b

Well 26

MW-102

MW-103

MW-101

Burn Pits (Former)

1997 Fuel Spill

MW-2

Well 24

MW-104

Well 23

AFFF Test Area

MW-3

MW-4

2001 Crash Site

MW-1

Figure 3c

Figure 3d

Figure 3e

Figure 3f

**Legend**

- ≥ 20 ppt PFOA + PFOS
- Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
- Detect to Hazard Index < 1
- Non-Detect
- Private Well
- Public Well
- OS Group Sample
- Independent Private Sample*
- Potential Source Locations
- Municipal Well
- Monitoring Well
- Interim Health Advisory Area
- City of La Crosse Sampling Areas

1:20,500

0 0.125 0.25 0.5 Miles

**POTABLE WELL SAMPLE LOCATIONS - OVERVIEW**

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

N W E S

Date: 08/03/2021
Drawn: KMC
Checked: EMT

Project No. 3651210173

wood.

**Figure: 3a**

1205
1422-3549
1425-0
1433-0
1434-1
1435-0
1438-0
1437-0
2317-0
1002
1001
1640-0
1631-0
1629-0
1637-0
1808-0
1660-1
1871-1
1009
1863-0
1006
1005
1822-0
1004
1008
1007
1003
1733-1
1694-0
695-0
1013
1010
1011
1014
1704-0
1012
1015
1016
2027
1841-0
1017
1197
2019-0
1023
1036
1027
1024
2013-0
1026
1025
2007-0
Well 26
MUNICIPAL WELL 26
1997 Fuel Spill
Nelson Park Rd
Louis Nelson County Park
Lake Shore Dr
Airport Rd
Breezy Point Rd
Lancaster St
Miller Pl
Hansen Ct
Hansen Rd
Yourdale Ave
Hickory Ave
Edgewater Pl
Esplanade Ln
650 ft
655 ft
656 ft
647 ft

**Legend**

- ≥ 20 ppt PFOA + PFOS
- Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
- Detect to Hazard Index < 1
- Non-Detect
- Private Well
- Public Well
- OS Group Sample
- Independent Private Sample*
- Potential Source Locations
- Municipal Well
- Monitoring Well
- Interim Health Advisory Area
- City of La Crosse Sampling Areas

1:6,000 0 0.04 0.08 0.16 Miles

# POTABLE WELL SAMPLE LOCATIONS - NORTHWEST

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

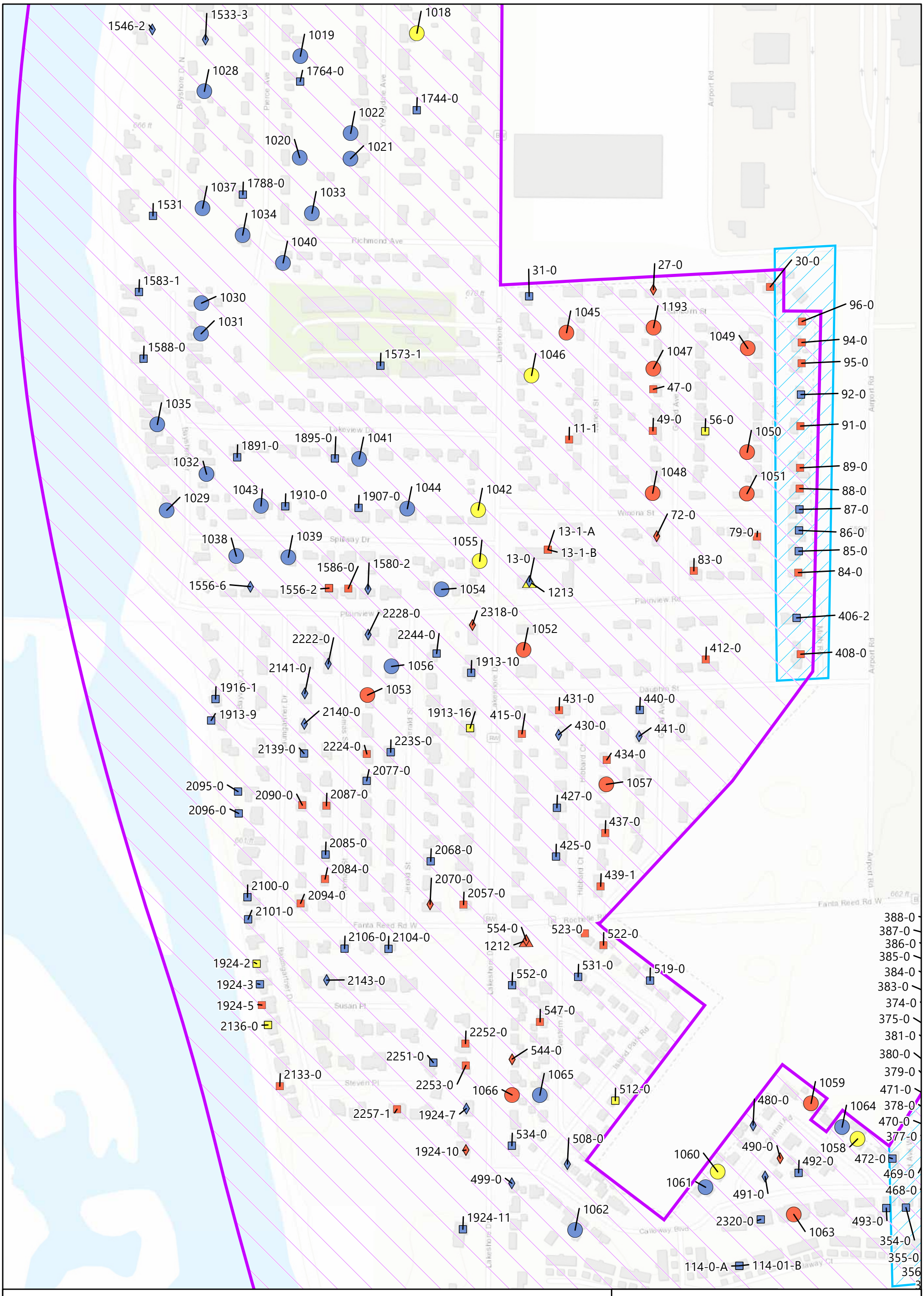
N W E S

Date: 08/03/2021
Drawn: KMC
Checked: EMT

Project No. 3651210173

wood.

**Figure: 3b**




**Legend**

- ≥ 20 ppt PFOA + PFOS
- Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
- Detect to Hazard Index < 1
- Non-Detect
- Private Well
- Public Well
- OS Group Sample
- Independent Private Sample*
- Potential Source Locations
- Municipal Well
- Monitoring Well
- Interim Health Advisory Area
- City of La Crosse Sampling Areas

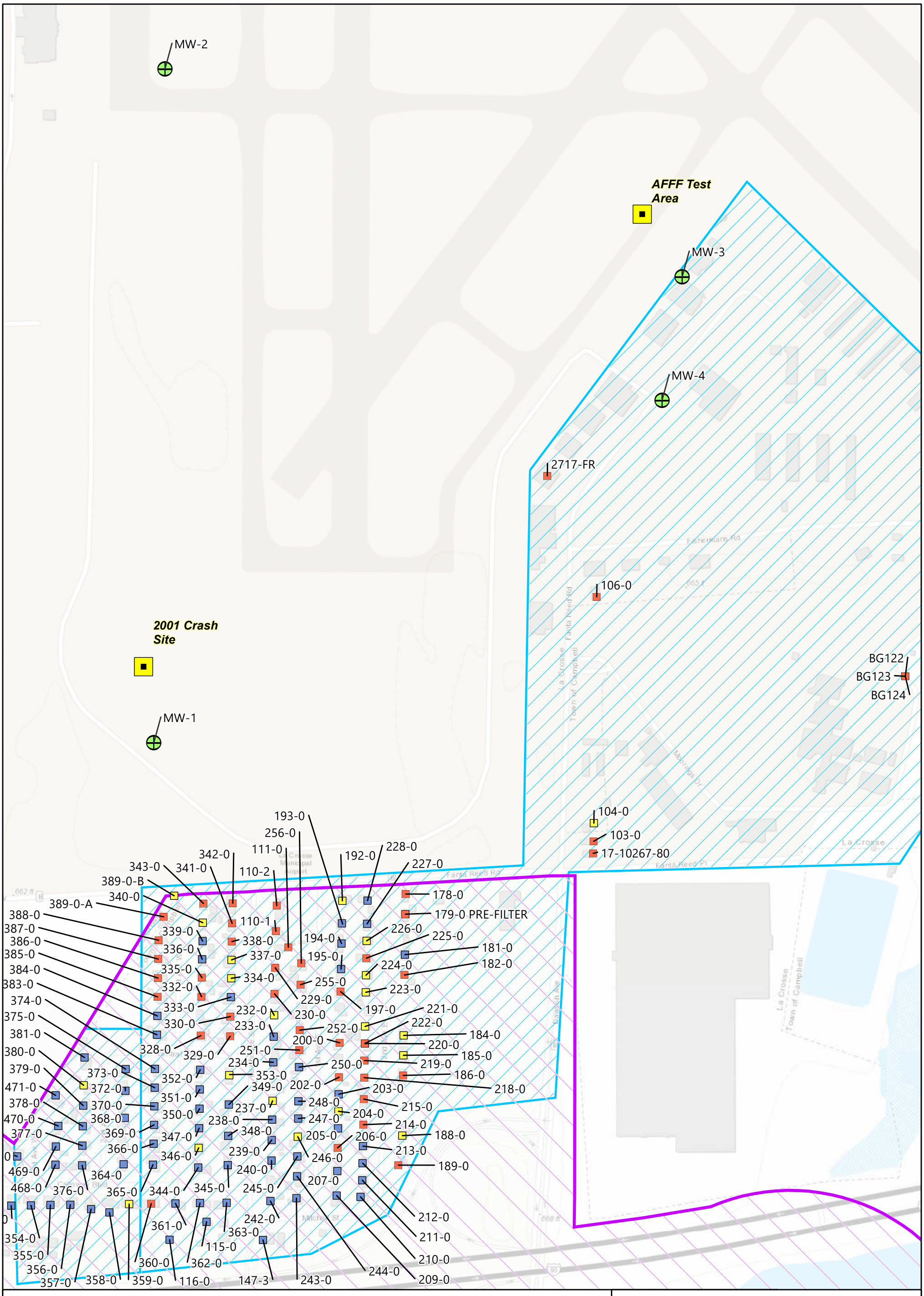
1:4,300 — 0 — 0.0275 — 0.055 — 0.11 Miles

# POTABLE WELL SAMPLE LOCATIONS - NORTHWEST CENTRAL

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

Date: 08/03/2021
Drawn: KMC
Checked: EMT
Project No. 3651210173
wood.
Figure: 3c




**Legend**

- ≥ 20 ppt PFOA + PFOS
- Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
- Detect to Hazard Index < 1
- Non-Detect
- Private Well
- Public Well
- OS Group Sample
- Independent Private Sample*
- Potential Source Locations
- Municipal Well
- Monitoring Well
- Interim Health Advisory Area
- City of La Crosse Sampling Areas

1:4,300

0 0.0275 0.055 0.11 Miles

# POTABLE WELL SAMPLE LOCATIONS - NORTHEST CENTRAL

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

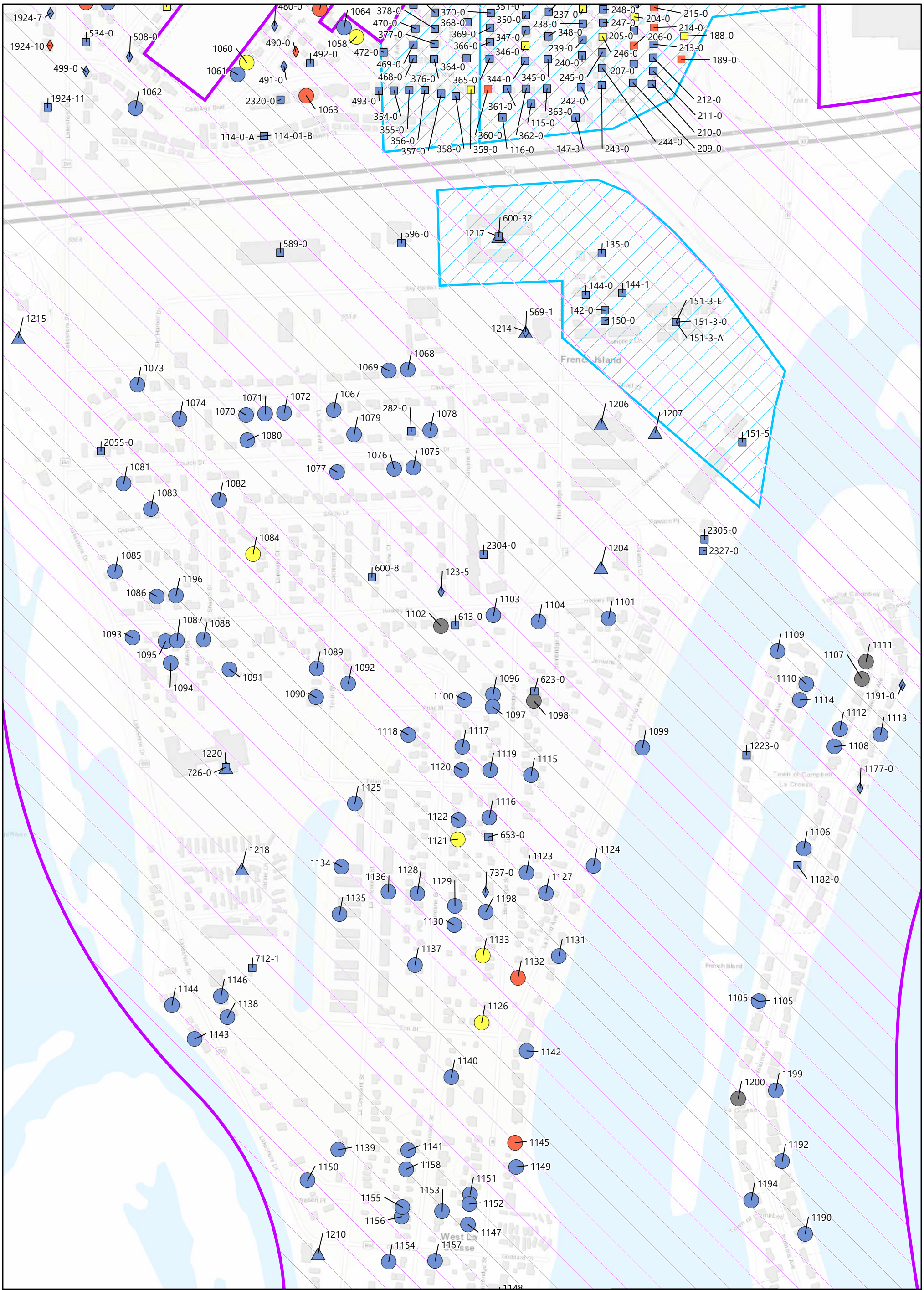
N W E S

Date: 08/03/2021
Drawn: KMC
Checked: EMT

Project No. 3651210173

wood.

**Figure: 3d**




**Legend**

- ≥ 20 ppt PFOA + PFOS
- Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
- Detect to Hazard Index < 1
- Non-Detect
- Private Well
- Public Well
- OS Group Sample
- Independent Private Sample*
- Potential Source Locations
- Municipal Well
- Monitoring Well
- Interim Health Advisory Area
- City of La Crosse Sampling Areas

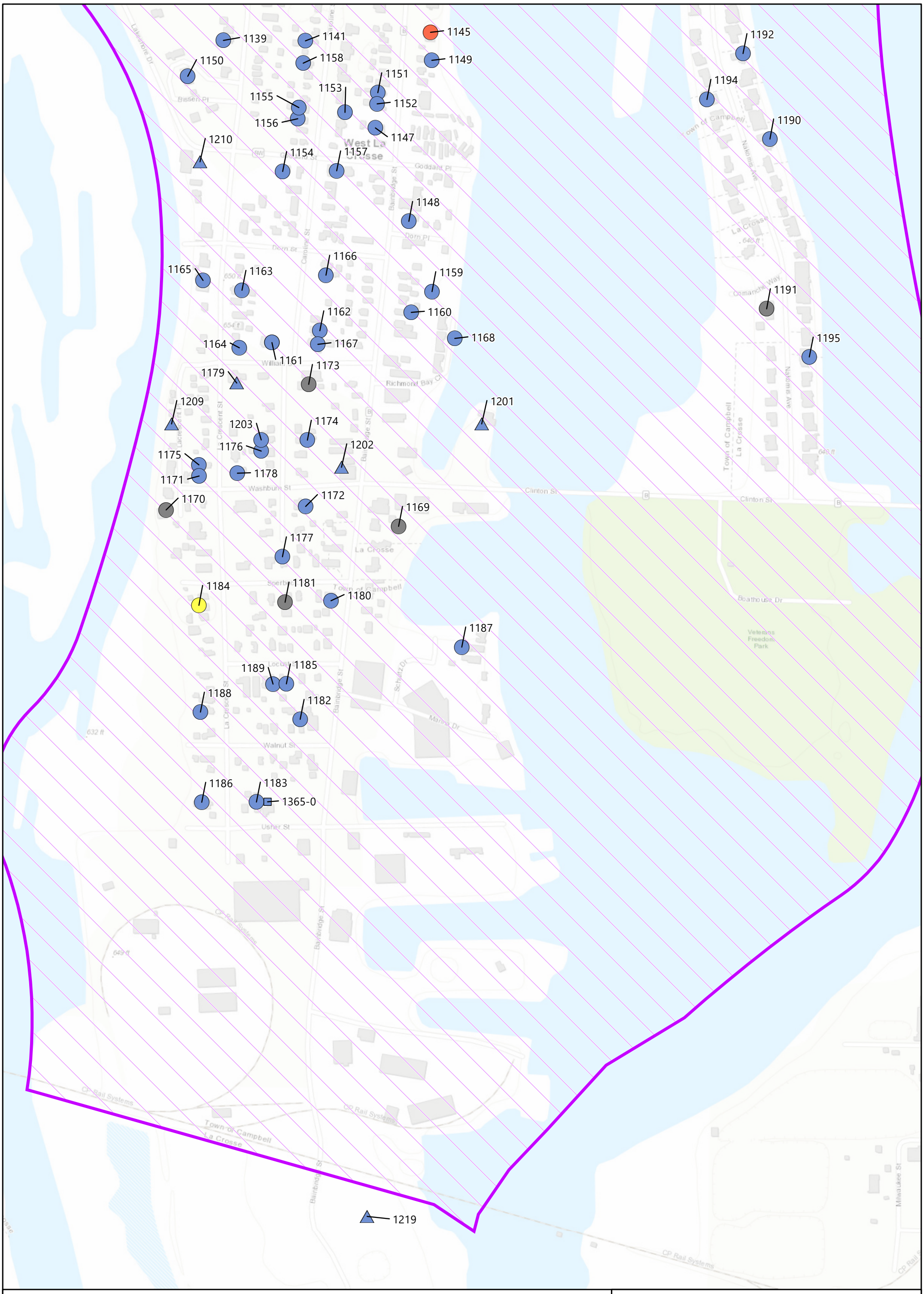
1:5,500 — 0 — 0.035 — 0.07 — 0.14 Miles

# POTABLE WELL SAMPLE LOCATIONS - SOUTH CENTRAL

Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

Date: 08/03/2021
Drawn: KMC
Checked: EMT
Project No. 3651210173
wood.
**Figure: 3e**


1139
1141
1145
1192
1150
1158
1149
1151
1194
1153
1155
1152
1190
1156
1147
1210
1154
1157
1148
1166
1165
1163
1159
1191
1162
1160
1168
1164
1167
1195
1161
1173
1179
1201
1209
1203
1174
1176
1202
1175
1178
1171
1172
1170
1169
1177
1184
1181
1180
1187
1189
1185
1188
1182
1186
1183
1365-0
1219
Legend
≥ 20 ppt PFOA + PFOS
Hazard Index ≥ 1 to PFOA + PFOS < 20 ppt
Detect to Hazard Index < 1
Non-Detect
Private Well
Public Well
OS Group Sample
Independent Private Sample*
Potential Source Locations
Municipal Well
Monitoring Well
Interim Health Advisory Area
City of La Crosse Sampling Areas
1:4,700
0 0.03 0.06 0.12
Miles
POTABLE WELL SAMPLE LOCATIONS - SOUTH
Potable Well Sampling Report
Wisconsin Department of Natural Resources
Town of Campbell, La Crosse County, Wisconsin
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,
N
W
E
S
Date: 08/03/2021
Drawn: KMC
Checked: EMT
Project No. 3651210173
wood.
Figure:
3f

# APPENDICES

# APPENDIX A

## Laboratory Analytical Results

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-72788-1
Client Project/Site: WDNR - Campbell PW Sampling

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/7/2021 4:33:36 PM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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QC Sample Results . . . . . 93
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Certification Summary . . . . . 129
Method Summary . . . . . 130
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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| *5+ | Isotope dilution analyte is outside acceptance limits, high biased. |
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-72788-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-72788-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 4/23/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 0.9º C, 1.5º C, 2.7º C and 4.8º C.

**LCMS**
Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgement was used to positively identify the analyte.

PWS-FD01-041921 (320-72788-3), PWS1015-OS-041921-100 (320-72788-14) and (CCB 320-484550/26)

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for 13C2 10:2 FTS the following samples: PWS-FD01-041921 (320-72788-3), PWS1004-OS-041921-100 (320-72788-12) and PWS1170-OS-041921-100 (320-72788-26). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2 FTS in the following samples: PWS1169-OS-041921-100 (320-72788-28) and PWS1020-OS-042021-100 (320-72788-34). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for 13C2 10:2 FTS in the following samples: PWS1003-IS-042021-100 (320-72788-30) and PWS1020-OS-042021-100 (320-72788-34). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgement was used to positively identify the analyte.

PWS1027-OS-042021-100 (320-72788-39)

Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgement was used to positively identify the analyte.
PWS1124-OS-042121-100 (320-72788-88)

Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgement was used to positively identify the analyte.
PWS1183-OS-042021-100 (320-72788-60), PWS1040-OS-042121-100 (320-72788-73) and PWS1145-OS-042121-100 (320-72788-83)

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analytes were outside of the established ratio limits. The qualitative identification of the analytes have some degree of uncertainty, and the reported values may have some high bias. However, analyst judgment was used to positively identify the analytes: (CCVL 320-484856/2).

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

## Job ID: 320-72788-1 (Continued)

### Laboratory: Eurofins TestAmerica, Sacramento (Continued)

**Organic Prep**

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-484284.

Method Code: 3535 PFC_28D
Matrix: Water

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

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1008-OS-041921-100 — Lab Sample ID: 320-72788-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 17 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.2 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.55 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.0 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.47 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 10 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.95 | J | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-041921 — Lab Sample ID: 320-72788-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.1 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.44 | J | 1.7 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.7 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.57 | J I | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 11 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.7 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1009-OS-041921-100 — Lab Sample ID: 320-72788-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.1 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.8 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.34 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.44 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.5 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.9 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.84 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1011-OS-041921-100 — Lab Sample ID: 320-72788-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.1 | J | 4.5 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.63 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.9 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1014-OS-041921-100 — Lab Sample ID: 320-72788-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 17 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.56 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.4 | | 1.7 | 0.70 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.73 | J | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.7 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.64 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1014-OS-041921-100 (Continued) — Lab Sample ID: 320-72788-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 2.3 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 11 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1002-OS-041921-100 — Lab Sample ID: 320-72788-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.2 | J | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.81 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.97 | J | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1004-OS-041921-100 — Lab Sample ID: 320-72788-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 25 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.2 | J | 1.6 | 0.40 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 1.6 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 1.6 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 7.6 | | 1.6 | 0.69 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.69 | J | 1.6 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 1.6 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.38 | J | 1.6 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 1.6 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.38 | J | 1.6 | 0.15 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.6 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1015-OS-041921-100 — Lab Sample ID: 320-72788-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.5 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.57 | J I | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.0 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.51 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.8 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.22 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1018-OS-041921-100 — Lab Sample ID: 320-72788-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 38 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.3 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.4 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.5 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 8.4 | | 1.7 | 0.70 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.8 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.58 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.3 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1018-OS-041921-100 (Continued) — Lab Sample ID: 320-72788-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.23 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.6 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1190-OS-041921-100 — Lab Sample ID: 320-72788-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.86 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.40 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.68 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.6 | | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1188-IS-041921-100 — Lab Sample ID: 320-72788-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 9.1 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.73 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.7 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.1 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1181-OS-041921-100 — Lab Sample ID: 320-72788-22

No Detections.

## Client Sample ID: PWS1172-OS-041921-100 — Lab Sample ID: 320-72788-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 4.5 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.58 | J | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1170-OS-041921-100 — Lab Sample ID: 320-72788-26

No Detections.

## Client Sample ID: PWS1169-OS-041921-100 — Lab Sample ID: 320-72788-28

No Detections.

## Client Sample ID: PWS1003-IS-042021-100 — Lab Sample ID: 320-72788-30

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.0 | | 1.8 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 7.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.2 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.6 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 12 | | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1017-OS-042021-100 — Lab Sample ID: 320-72788-32

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1017-OS-042021-100 (Continued) — Lab Sample ID: 320-72788-32

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanoic acid (PFPeA) | 1.1 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.2 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.56 | J | 1.8 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 9.4 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.43 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 11 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1020-OS-042021-100 — Lab Sample ID: 320-72788-34

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.6 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 13 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.26 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.8 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042021 — Lab Sample ID: 320-72788-36

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.5 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 15 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.1 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.2 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1024-OS-042021-100 — Lab Sample ID: 320-72788-37

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 29 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.9 | | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.1 | | 1.8 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 8.0 | | 1.8 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.85 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.8 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 12 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1027-OS-042021-100 — Lab Sample ID: 320-72788-39

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 20 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.7 | | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.4 | I | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 12 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 21 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1027-OS-042021-100 (Continued) — Lab Sample ID: 320-72788-39

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 0.67 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 9.7 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 20 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1021-OS-042021-100 — Lab Sample ID: 320-72788-41

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 19 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.83 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.3 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.51 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.8 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.4 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1022-OS-042021-100 — Lab Sample ID: 320-72788-43

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.55 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.36 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.6 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1025-OS-042021-100 — Lab Sample ID: 320-72788-45

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 16 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.4 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.67 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.3 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.5 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.59 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.6 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1026-OS-042021-100 — Lab Sample ID: 320-72788-47

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 5.1 | 2.4 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.6 | J | 2.0 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 2.0 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.47 | J | 2.0 | 0.30 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 2.0 | 0.58 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.7 | | 2.0 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1028-OS-042021-100 — Lab Sample ID: 320-72788-49

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.4 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.73 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.5 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1006-OS-042021-100 — Lab Sample ID: 320-72788-51

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 13 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.72 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.55 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.0 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 12 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042012 — Lab Sample ID: 320-72788-53

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.8 | J | 4.9 | 2.4 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.7 | | 2.0 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.1 | | 2.0 | 0.57 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.6 | J | 2.0 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.3 | | 2.0 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.90 | J | 2.0 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.81 | J | 2.0 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 2.0 | 0.56 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1168-OS-042021-100 — Lab Sample ID: 320-72788-54

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.7 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.8 | | 1.9 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.3 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.7 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.99 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.66 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.87 | J | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1179-OS-042021-100 — Lab Sample ID: 320-72788-56

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.0 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.82 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1163-OS-042021-100 — Lab Sample ID: 320-72788-58

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.1 | J | 4.5 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.60 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.52 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1183-OS-042021-100 — Lab Sample ID: 320-72788-60

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.9 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.0 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.52 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.19 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.7 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042121 — Lab Sample ID: 320-72788-62

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.7 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.41 | J | 1.8 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.55 | J | 1.8 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.31 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.95 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.8 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1031-OS-042121-100 — Lab Sample ID: 320-72788-63

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 17 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.77 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.54 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.33 | J | 1.8 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.52 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.7 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.63 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.8 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.7 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1032-OS-042121-100 — Lab Sample ID: 320-72788-65

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.1 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.41 | J | 1.8 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1038-OS-042121-100 — Lab Sample ID: 320-72788-67

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.8 | | 4.9 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.46 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.2 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.2 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1043-OS-042121-100 — Lab Sample ID: 320-72788-69

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 11 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.47 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.2 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.7 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1035-OS-042121-100 — Lab Sample ID: 320-72788-71

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.5 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.34 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.46 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.4 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.5 | J | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1040-OS-042121-100 — Lab Sample ID: 320-72788-73

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 10 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.41 | J I | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.4 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1033-OS-042121-100 — Lab Sample ID: 320-72788-75

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 9.8 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.40 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.36 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.7 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.31 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.9 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.7 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1007-OS-042121-100 — Lab Sample ID: 320-72788-77

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 17 | | 5.0 | 2.4 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.8 | J | 2.0 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.84 | J | 2.0 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.6 | | 2.0 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.39 | J | 2.0 | 0.30 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

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## Client Sample ID: PWS1007-OS-042121-100 (Continued) — Lab Sample ID: 320-72788-77

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 2.0 | 0.57 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 10 | | 2.0 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1184-OS-042121-100 — Lab Sample ID: 320-72788-79

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.7 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.82 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.8 | | 1.8 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.46 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.3 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.5 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 37 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1153-OS-042121-100 — Lab Sample ID: 320-72788-81

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | J | 2.0 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 2.0 | 0.57 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J | 2.0 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1145-OS-042121-100 — Lab Sample ID: 320-72788-83

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.5 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.4 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.8 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.6 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 8.9 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.80 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 10 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.27 | J I | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042121 — Lab Sample ID: 320-72788-85

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.1 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.0 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.9 | | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 8.4 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.61 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 10 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.51 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 14 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS-FD02-042121 (Continued) — Lab Sample ID: 320-72788-85

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 3.7 | | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1157-OS-042121-100 — Lab Sample ID: 320-72788-86

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.6 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.8 | | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.0 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.93 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.9 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.40 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.29 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.3 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.8 | 0.87 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1124-OS-042121-100 — Lab Sample ID: 320-72788-88

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.60 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.98 | J | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.72 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.79 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.4 | J I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 4.5 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1008-OS-041921-100**
**Date Collected: 04/19/21 11:16**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-1**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **17** | | 4.3 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.2** | | 1.7 | 0.73 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.55** | **J** | 1.7 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.0** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.47** | **J** | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.7 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **10** | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.95** | **J** | 1.7 | 0.84 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 04/28/21 19:10 | 04/30/21 01:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *71* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:05* | *1* |
| *13C5 PFPeA* | *67* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:05* | *1* |
| *13C2 PFHxA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:05* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:05* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:05* | *1* |

## Client Sample ID: PWS1008-OS-041921-100

**Lab Sample ID: 320-72788-1**

**Date Collected: 04/19/21 11:16**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 95 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 PFHxDA | 102 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C4 PFOS | 91 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| M2-4:2 FTS | 95 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| M2-6:2 FTS | 113 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| M2-8:2 FTS | 126 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C2 10:2 FTS | 122 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| 13C3 HFPO-DA | 81 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d3-NMeFOSAA | 83 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d5-NEtFOSAA | 84 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d7-N-MeFOSE-M | 75 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |
| d9-N-EtFOSE-M | 74 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:05 | 1 |

## Client Sample ID: PWS-FD01-041921

**Lab Sample ID: 320-72788-3**

**Date Collected: 04/19/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 4.4 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.1** | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.44** | **J** | 1.7 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.64 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.7** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.57** | **J I** | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.7 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS-FD01-041921**
**Date Collected: 04/19/21 12:01**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **11** | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.7 | 0.86 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NMeFOSA | ND | | 1.7 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 01:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *71* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C5 PFPeA* | *66* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFHxA* | *80* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C5 PFNA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFTeDA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C4 PFOS* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *M2-4:2 FTS* | *104* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *M2-6:2 FTS* | *104* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *M2-8:2 FTS* | *124* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C2 10:2 FTS* | *180* | **5+* | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *13C3 HFPO-DA* | *79* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d5-NEtFOSAA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:15* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1009-OS-041921-100**
**Date Collected: 04/19/21 13:30**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-4**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.1** | | 4.2 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.8** | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.34** | **J** | 1.7 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.44** | **J** | 1.7 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.5** | **J** | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.9** | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.84** | **J** | 1.7 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 04/28/21 19:10 | 04/30/21 01:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:24* | *1* |
| *13C5 PFPeA* | *63* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:24* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:24* | *1* |
| *13C4 PFHpA* | *72* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:24* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:24* | *1* |

## Client Sample ID: PWS1009-OS-041921-100
**Lab Sample ID: 320-72788-4**
**Date Collected: 04/19/21 13:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 PFDA | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 PFUnA | 97 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 PFTeDA | 105 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 PFHxDA | 105 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| M2-4:2 FTS | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| M2-6:2 FTS | 110 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| M2-8:2 FTS | 107 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C2 10:2 FTS | 136 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| 13C3 HFPO-DA | 76 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d3-NMeFOSAA | 95 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d5-NEtFOSAA | 102 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d-N-MeFOSA-M | 82 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:24 | 1 |

## Client Sample ID: PWS1011-OS-041921-100
**Lab Sample ID: 320-72788-6**
**Date Collected: 04/19/21 14:31**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.1** | **J** | 4.5 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.9** | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.63** | **J** | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1011-OS-041921-100**
**Date Collected: 04/19/21 14:31**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-6**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.9** | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.88 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 01:34 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *71* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C5 PFPeA* | *60* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFHxA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C4 PFHpA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C3 PFBS* | *75* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C4 PFOS* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *M2-6:2 FTS* | *105* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *M2-8:2 FTS* | *107* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C2 10:2 FTS* | *112* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *13C3 HFPO-DA* | *73* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d5-NEtFOSAA* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d7-N-MeFOSE-M* | *79* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |
| *d9-N-EtFOSE-M* | *72* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:34* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1014-OS-041921-100**
**Date Collected: 04/19/21 16:03**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-8**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **17** | | 4.1 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.56** | **J** | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.4** | | 1.7 | 0.70 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.73** | **J** | 1.7 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.60 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.7** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.64** | **J** | 1.7 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.3** | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **11** | | 1.7 | 0.45 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.81 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.99 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| NEtFOSE | ND | | 1.7 | 0.70 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 01:43 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:43* | *1* |
| *13C5 PFPeA* | *62* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:43* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:43* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:43* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:43* | *1* |

## Client Sample ID: PWS1014-OS-041921-100
**Lab Sample ID: 320-72788-8**

**Date Collected: 04/19/21 16:03**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 93 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 PFDA | 96 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 PFUnA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 PFDoA | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 PFHxDA | 95 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C3 PFBS | 72 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 18O2 PFHxS | 84 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C8 FOSA | 101 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| M2-4:2 FTS | 97 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| M2-6:2 FTS | 104 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| M2-8:2 FTS | 127 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C2 10:2 FTS | 129 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| 13C3 HFPO-DA | 70 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d3-NMeFOSAA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d5-NEtFOSAA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d-N-MeFOSA-M | 80 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 01:43 | 1 |

## Client Sample ID: PWS1002-OS-041921-100
**Lab Sample ID: 320-72788-10**

**Date Collected: 04/19/21 16:43**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.2** | **J** | 4.2 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.71 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.81** | **J** | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1002-OS-041921-100**
**Lab Sample ID: 320-72788-10**
**Date Collected: 04/19/21 16:43**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **0.97** | **J** | 1.7 | 0.45 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 01:53 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *64* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C5 PFPeA* | *55* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C4 PFHpA* | *74* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFTeDA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 PFHxDA* | *96* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C3 PFBS* | *68* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C4 PFOS* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C8 FOSA* | *97* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *M2-4:2 FTS* | *98* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *M2-6:2 FTS* | *104* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C2 10:2 FTS* | *115* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *13C3 HFPO-DA* | *74* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d3-NMeFOSAA* | *96* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d5-NEtFOSAA* | *96* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d-N-MeFOSA-M* | *84* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d-N-EtFOSA-M* | *85* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 01:53* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1004-OS-041921-100**
**Lab Sample ID: 320-72788-12**
**Date Collected: 04/19/21 17:23**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **25** | | 4.1 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.2** | **J** | 1.6 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.5** | **J** | 1.6 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.2** | **J** | 1.6 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **7.6** | | 1.6 | 0.69 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.69** | **J** | 1.6 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.6 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.6 | 0.90 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.6 | 0.45 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.6 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.6 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.6 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.6 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.1** | | 1.6 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.38** | **J** | 1.6 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.9** | | 1.6 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.38** | **J** | 1.6 | 0.15 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.6 | 0.44 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.6 | 0.30 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.6 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.6 | 0.79 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.6 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NMeFOSA | ND | | 1.6 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NEtFOSA | ND | | 1.6 | 0.71 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.98 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NMeFOSE | ND | | 3.3 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| NEtFOSE | ND | | 1.6 | 0.69 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 4:2 FTS | ND | | 1.6 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 8:2 FTS | ND | | 1.6 | 0.37 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 10:2 FTS | ND | | 1.6 | 0.55 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| F-53B Major | ND | | 1.6 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| F-53B Minor | ND | | 1.6 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.6 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 02:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:30* | *1* |
| *13C5 PFPeA* | *76* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:30* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:30* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:30* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:30* | *1* |

## Client Sample ID: PWS1004-OS-041921-100
**Lab Sample ID: 320-72788-12**

**Date Collected: 04/19/21 17:23**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 PFUnA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 PFTeDA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 PFHxDA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C3 PFBS | 81 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| M2-4:2 FTS | 84 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| M2-6:2 FTS | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| M2-8:2 FTS | 100 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C2 10:2 FTS | 153 | *5+ | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| 13C3 HFPO-DA | 74 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d5-NEtFOSAA | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d-N-MeFOSA-M | 75 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |
| d9-N-EtFOSE-M | 79 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 02:30 | 1 |

## Client Sample ID: PWS1015-OS-041921-100
**Lab Sample ID: 320-72788-14**

**Date Collected: 04/19/21 18:25**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 4.4 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.5** | | 1.8 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.57** | **J I** | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.0** | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.51** | **J** | 1.8 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.8** | | 1.8 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.22** | **J** | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1015-OS-041921-100**
**Lab Sample ID: 320-72788-14**
**Date Collected: 04/19/21 18:25**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.86 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 02:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C5 PFPeA* | *65* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C4 PFHpA* | *76* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C5 PFNA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C4 PFOS* | *99* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *M2-4:2 FTS* | *100* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *M2-6:2 FTS* | *116* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *M2-8:2 FTS* | *109* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C2 10:2 FTS* | *141* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *13C3 HFPO-DA* | *75* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d3-NMeFOSAA* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d-N-EtFOSA-M* | *76* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |
| *d9-N-EtFOSE-M* | *72* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 02:59* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1018-OS-041921-100**
**Lab Sample ID: 320-72788-16**
**Date Collected: 04/19/21 19:05**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **38** | | 4.1 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.3** | | 1.7 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.4** | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.5** | **J** | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **8.4** | | 1.7 | 0.70 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.60 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.8** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.58** | **J** | 1.7 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.3** | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.23** | **J** | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.6** | | 1.7 | 0.45 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.81 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.99 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| NEtFOSE | ND | | 1.7 | 0.70 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.55 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| F-53B Minor | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 03:08 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:08* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:08* | *1* |
| *13C2 PFHxA* | *76* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:08* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:08* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:08* | *1* |

## Client Sample ID: PWS1018-OS-041921-100
**Lab Sample ID: 320-72788-16**
**Date Collected: 04/19/21 19:05**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 99 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 PFUnA | 106 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 PFDoA | 95 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 PFTeDA | 98 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C4 PFOS | 97 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C8 FOSA | 105 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| M2-4:2 FTS | 54 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| M2-6:2 FTS | 107 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| M2-8:2 FTS | 104 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C2 10:2 FTS | 133 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d3-NMeFOSAA | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d5-NEtFOSAA | 92 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d-N-MeFOSA-M | 92 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d7-N-MeFOSE-M | 77 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |
| d9-N-EtFOSE-M | 76 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:08 | 1 |

## Client Sample ID: PWS1190-OS-041921-100
**Lab Sample ID: 320-72788-18**
**Date Collected: 04/19/21 10:50**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.4 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.86** | **J** | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.40** | **J** | 1.8 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.68** | **J** | 1.8 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1190-OS-041921-100**
**Lab Sample ID: 320-72788-18**
**Date Collected: 04/19/21 10:50**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.6** | | 1.8 | 0.86 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 03:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C5 PFPeA* | *73* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C4 PFHpA* | *80* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C5 PFNA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFDA* | *80* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFUnA* | *83* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFTeDA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 PFHxDA* | *101* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C4 PFOS* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *M2-8:2 FTS* | *105* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C2 10:2 FTS* | *119* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *13C3 HFPO-DA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:17* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1188-IS-041921-100**
**Lab Sample ID: 320-72788-20**
**Date Collected: 04/19/21 12:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **9.1** | | 4.4 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.64 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.1** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.73** | **J** | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.7** | | 1.7 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.1** | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.86 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NMeFOSA | ND | | 1.7 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 03:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:27* | *1* |
| *13C5 PFPeA* | *63* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:27* | *1* |
| *13C2 PFHxA* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:27* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:27* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:27* | *1* |

## Client Sample ID: PWS1188-IS-041921-100
**Lab Sample ID: 320-72788-20**

**Date Collected: 04/19/21 12:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 97 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 PFUnA | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 PFDoA | 81 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 PFTeDA | 80 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C3 PFBS | 75 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C4 PFOS | 89 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| M2-4:2 FTS | 100 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| M2-6:2 FTS | 109 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C2 10:2 FTS | 135 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| 13C3 HFPO-DA | 72 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d5-NEtFOSAA | 91 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d-N-MeFOSA-M | 80 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d-N-EtFOSA-M | 75 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:27 | 1 |

## Client Sample ID: PWS1181-OS-041921-100
**Lab Sample ID: 320-72788-22**

**Date Collected: 04/19/21 14:40**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1181-OS-041921-100**
**Date Collected: 04/19/21 14:40**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-22**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.88 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 03:36 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C5 PFNA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFTeDA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 PFHxDA* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *M2-4:2 FTS* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *M2-8:2 FTS* | *117* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C2 10:2 FTS* | *146* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *13C3 HFPO-DA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d3-NMeFOSAA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d-N-MeFOSA-M* | *86* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d-N-EtFOSA-M* | *82* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:36* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1172-OS-041921-100**
**Date Collected: 04/19/21 16:55**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-24**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.8** | **J** | 4.5 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.58** | **J** | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.88 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 03:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:46* | *1* |

## Client Sample ID: PWS1172-OS-041921-100
**Lab Sample ID: 320-72788-24**

**Date Collected: 04/19/21 16:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 81 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C2 PFUnA | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C2 PFHxDA | 79 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C3 PFBS | 82 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C4 PFOS | 94 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C8 FOSA | 97 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| M2-4:2 FTS | 88 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| M2-6:2 FTS | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| M2-8:2 FTS | 110 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C2 10:2 FTS | 130 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d5-NEtFOSAA | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d-N-EtFOSA-M | 86 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |
| d9-N-EtFOSE-M | 76 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 03:46 | 1 |

## Client Sample ID: PWS1170-OS-041921-100
**Lab Sample ID: 320-72788-26**

**Date Collected: 04/19/21 18:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.9 | 0.19 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1170-OS-041921-100**
**Date Collected: 04/19/21 18:10**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-26**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 04/28/21 19:10 | 04/30/21 03:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFDoA* | *99* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFTeDA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 PFHxDA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *18O2 PFHxS* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C4 PFOS* | *96* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C8 FOSA* | *99* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *M2-4:2 FTS* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *M2-8:2 FTS* | *126* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C2 10:2 FTS* | *167* | *5+ | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d5-NEtFOSAA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 03:55* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1169-OS-041921-100**
**Lab Sample ID: 320-72788-28**
**Date Collected: 04/19/21 18:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 12:11 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C4 PFHpA* | *79* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C4 PFOA* | *88* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C5 PFNA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |
| *13C2 PFUnA* | *79* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:11* | *1* |

## Client Sample ID: PWS1169-OS-041921-100
**Lab Sample ID: 320-72788-28**
**Date Collected: 04/19/21 18:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 68 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C2 PFTeDA | 81 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C2 PFHxDA | 76 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 18O2 PFHxS | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C4 PFOS | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C8 FOSA | 88 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| M2-4:2 FTS | 98 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| M2-6:2 FTS | 119 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| M2-8:2 FTS | 167 | *5+ | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C2 10:2 FTS | 142 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d3-NMeFOSAA | 73 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d5-NEtFOSAA | 79 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d-N-MeFOSA-M | 52 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d-N-EtFOSA-M | 63 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d7-N-MeFOSE-M | 68 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |
| d9-N-EtFOSE-M | 64 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 12:11 | 1 |

## Client Sample ID: PWS1003-IS-042021-100
**Lab Sample ID: 320-72788-30**
**Date Collected: 04/20/21 09:56**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.4 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.0** | | 1.8 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.96 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **7.9** | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.2** | **J** | 1.8 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.6** | | 1.8 | 0.50 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **12** | | 1.8 | 0.47 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1003-IS-042021-100**
**Date Collected: 04/20/21 09:56**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-30**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.86 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| NEtFOSE | ND | | 1.8 | 0.74 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 04/28/21 19:10 | 04/30/21 12:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *66* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C5 PFPeA* | *64* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C4 PFHpA* | *76* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C5 PFNA* | *86* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFUnA* | *105* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFDoA* | *104* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFTeDA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C4 PFOS* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *M2-6:2 FTS* | *98* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *M2-8:2 FTS* | *132* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C2 10:2 FTS* | *179* | *5+ | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d3-NMeFOSAA* | *98* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d5-NEtFOSAA* | *99* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d-N-EtFOSA-M* | *88* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |
| *d9-N-EtFOSE-M* | *88* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:21* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1017-OS-042021-100**
**Date Collected: 04/20/21 10:42**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-32**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.5 | 2.2 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.1** | **J** | 1.8 | 0.45 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.2** | **J** | 1.8 | 0.53 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.56** | **J** | 1.8 | 0.25 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **9.4** | | 1.8 | 0.18 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.43** | **J** | 1.8 | 0.27 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **J** | 1.8 | 0.52 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **11** | | 1.8 | 0.49 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | | 1.8 | 0.89 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/28/21 19:10 | 05/06/21 22:45 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *04/28/21 19:10* | *05/06/21 22:45* | *1* |
| *13C5 PFPeA* | *68* | | *25 - 150* | *04/28/21 19:10* | *05/06/21 22:45* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *04/28/21 19:10* | *05/06/21 22:45* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *04/28/21 19:10* | *05/06/21 22:45* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *04/28/21 19:10* | *05/06/21 22:45* | *1* |

## Client Sample ID: PWS1017-OS-042021-100
**Lab Sample ID: 320-72788-32**

**Date Collected: 04/20/21 10:42**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 PFDA | 83 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 PFDoA | 85 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 PFTeDA | 73 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 PFHxDA | 68 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C3 PFBS | 83 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| M2-4:2 FTS | 88 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| M2-8:2 FTS | 101 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C2 10:2 FTS | 90 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d5-NEtFOSAA | 89 | | 25 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d-N-EtFOSA-M | 71 | | 10 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d7-N-MeFOSE-M | 72 | | 10 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 04/28/21 19:10 | 05/06/21 22:45 | 1 |

## Client Sample ID: PWS1020-OS-042021-100
**Lab Sample ID: 320-72788-34**

**Date Collected: 04/20/21 11:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.6** | | 4.2 | 2.0 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **13** | | 1.7 | 0.17 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.26** | **J** | 1.7 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.7 | 0.48 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1020-OS-042021-100**
**Lab Sample ID: 320-72788-34**
**Date Collected: 04/20/21 11:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.8** | | 1.7 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.83 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 04/28/21 19:10 | 04/30/21 12:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *71* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C5 PFPeA* | *70* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFUnA* | *106* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFDoA* | *68* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 PFHxDA* | *83* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *18O2 PFHxS* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *M2-4:2 FTS* | *103* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *M2-6:2 FTS* | *111* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *M2-8:2 FTS* | *208* | **5+* | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C2 10:2 FTS* | *184* | **5+* | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *13C3 HFPO-DA* | *79* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d3-NMeFOSAA* | *90* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d5-NEtFOSAA* | *95* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d7-N-MeFOSE-M* | *70* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |
| *d9-N-EtFOSE-M* | *67* | | *10 - 150* | *04/28/21 19:10* | *04/30/21 12:30* | *1* |

## Client Sample ID: PWS-FD01-042021
**Lab Sample ID: 320-72788-36**

**Date Collected: 04/20/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.5** | | 4.5 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **15** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.8 | 0.27 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.1** | **J** | 1.8 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **5.2** | | 1.8 | 0.49 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/29/21 04:17 | 05/01/21 07:20 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:20* | *1* |
| *13C5 PFPeA* | *67* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:20* | *1* |
| *13C2 PFHxA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:20* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:20* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:20* | *1* |

## Client Sample ID: PWS-FD01-042021
**Lab Sample ID: 320-72788-36**

**Date Collected: 04/20/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 92 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 PFUnA | 95 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 PFTeDA | 94 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| M2-4:2 FTS | 101 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| M2-6:2 FTS | 111 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| M2-8:2 FTS | 100 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C2 10:2 FTS | 106 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| 13C3 HFPO-DA | 76 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d3-NMeFOSAA | 87 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d5-NEtFOSAA | 92 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d-N-MeFOSA-M | 85 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d-N-EtFOSA-M | 81 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 07:20 | 1 |

## Client Sample ID: PWS1024-OS-042021-100
**Lab Sample ID: 320-72788-37**

**Date Collected: 04/20/21 13:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **29** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.9** | | 1.8 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.1** | | 1.8 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.8 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **8.0** | | 1.8 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.9** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.85** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.8** | | 1.8 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1024-OS-042021-100**
**Lab Sample ID: 320-72788-37**
**Date Collected: 04/20/21 13:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **12** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.91 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 07:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFHxA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C5 PFNA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFUnA* | *101* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFTeDA* | *93* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *M2-6:2 FTS* | *108* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *M2-8:2 FTS* | *100* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C2 10:2 FTS* | *117* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *13C3 HFPO-DA* | *75* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d3-NMeFOSAA* | *101* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d5-NEtFOSAA* | *97* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d-N-EtFOSA-M* | *83* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:30* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1027-OS-042021-100**
**Date Collected: 04/20/21 13:32**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-39**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **20** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.7** | | 1.8 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.4** | **I** | 1.8 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.2** | **J** | 1.8 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **12** | | 1.8 | 0.78 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **21** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.67** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **9.7** | | 1.8 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **20** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 07:39 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C4 PFHpA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |

## Client Sample ID: PWS1027-OS-042021-100
**Lab Sample ID: 320-72788-39**
**Date Collected: 04/20/21 13:32**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFUnA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFDoA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFTeDA* | *95* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 PFHxDA* | *100* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *M2-4:2 FTS* | *81* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *M2-6:2 FTS* | *105* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C2 10:2 FTS* | *109* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d5-NEtFOSAA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |
| *d9-N-EtFOSE-M* | *85* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:39* | *1* |

## Client Sample ID: PWS1021-OS-042021-100
**Lab Sample ID: 320-72788-41**
**Date Collected: 04/20/21 14:36**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **19** | | 4.7 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.83** | **J** | 1.9 | 0.55 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.3** | | 1.9 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **11** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.51** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.8** | | 1.9 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1021-OS-042021-100**
**Lab Sample ID: 320-72788-41**
**Date Collected: 04/20/21 14:36**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **6.4** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:17 | 05/01/21 07:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C5 PFPeA* | *71* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C4 PFHpA* | *83* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C4 PFOA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C5 PFNA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFDA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFUnA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFDoA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C4 PFOS* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *M2-4:2 FTS* | *80* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *M2-6:2 FTS* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *M2-8:2 FTS* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C2 10:2 FTS* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *13C3 HFPO-DA* | *73* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d5-NEtFOSAA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d-N-EtFOSA-M* | *78* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d7-N-MeFOSE-M* | *83* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |
| *d9-N-EtFOSE-M* | *79* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:49* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1022-OS-042021-100**
**Lab Sample ID: 320-72788-43**
**Date Collected: 04/20/21 15:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 4.8 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.47 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.55** | **J** | 1.9 | 0.26 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.2** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.36** | **J** | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.9** | | 1.9 | 0.55 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **8.6** | | 1.9 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.94 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:17 | 05/01/21 07:58 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *68* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C5 PFPeA* | *65* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFHxA* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |

## Client Sample ID: PWS1022-OS-042021-100
**Lab Sample ID: 320-72788-43**
**Date Collected: 04/20/21 15:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFDA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 PFHxDA* | *104* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C3 PFBS* | *70* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C8 FOSA* | *92* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *M2-4:2 FTS* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *M2-6:2 FTS* | *101* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *M2-8:2 FTS* | *96* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *13C3 HFPO-DA* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d5-NEtFOSAA* | *92* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:58* | *1* |

## Client Sample ID: PWS1025-OS-042021-100
**Lab Sample ID: 320-72788-45**
**Date Collected: 04/20/21 16:18**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **16** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.4** | **J** | 1.8 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.67** | **J** | 1.8 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.3** | | 1.8 | 0.78 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.5** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.59** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.6** | | 1.8 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1025-OS-042021-100**
**Lab Sample ID: 320-72788-45**
**Date Collected: 04/20/21 16:18**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 08:07 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C5 PFPeA* | *67* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C4 PFOA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C5 PFNA* | *94* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C3 PFBS* | *72* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C4 PFOS* | *81* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C8 FOSA* | *88* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *M2-4:2 FTS* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *M2-6:2 FTS* | *111* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *M2-8:2 FTS* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C2 10:2 FTS* | *107* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *13C3 HFPO-DA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d5-NEtFOSAA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |
| *d9-N-EtFOSE-M* | *75* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:07* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1026-OS-042021-100**
**Date Collected: 04/20/21 16:54**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-47**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 5.1 | 2.4 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.59 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.6** | **J** | 2.0 | 0.86 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.56 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.74 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.95 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.1** | | 2.0 | 0.20 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.47** | **J** | 2.0 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 2.0 | 0.58 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **8.7** | | 2.0 | 0.55 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.38 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.33 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.99 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NMeFOSA | ND | | 2.0 | 0.44 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NEtFOSA | ND | | 2.0 | 0.88 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NMeFOSAA | ND | | 5.1 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NEtFOSAA | ND | | 5.1 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NMeFOSE | ND | | 4.1 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| NEtFOSE | ND | | 2.0 | 0.86 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 6:2 FTS | ND | | 5.1 | 2.5 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.47 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| HFPO-DA (GenX) | ND | | 4.1 | 1.5 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| F-53B Minor | ND | | 2.0 | 0.33 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.41 | ng/L | | 04/29/21 04:17 | 05/01/21 08:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *78* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:17* | *1* |
| *13C5 PFPeA* | *69* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:17* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:17* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:17* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:17* | *1* |

## Client Sample ID: PWS1026-OS-042021-100
**Lab Sample ID: 320-72788-47**

**Date Collected: 04/20/21 16:54**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 PFDA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 PFUnA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 PFTeDA | 95 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C3 PFBS | 73 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C8 FOSA | 89 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| M2-4:2 FTS | 91 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| M2-6:2 FTS | 106 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C2 10:2 FTS | 98 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| 13C3 HFPO-DA | 79 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d3-NMeFOSAA | 87 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d5-NEtFOSAA | 87 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d7-N-MeFOSE-M | 76 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 08:17 | 1 |

## Client Sample ID: PWS1028-OS-042021-100
**Lab Sample ID: 320-72788-49**

**Date Collected: 04/20/21 17:42**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.4** | **J** | 4.6 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.73** | **J** | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1028-OS-042021-100**
**Date Collected: 04/20/21 17:42**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-49**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.5** | | 1.9 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 08:26 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C5 PFPeA* | *58* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFHxA* | *72* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C4 PFHpA* | *70* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C4 PFOA* | *83* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C5 PFNA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFDA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFDoA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C3 PFBS* | *71* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *18O2 PFHxS* | *80* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C4 PFOS* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *M2-6:2 FTS* | *103* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C2 10:2 FTS* | *108* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *13C3 HFPO-DA* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d5-NEtFOSAA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d-N-EtFOSA-M* | *78* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d7-N-MeFOSE-M* | *72* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 08:26* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1006-OS-042021-100**
**Lab Sample ID: 320-72788-51**
**Date Collected: 04/20/21 18:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **13** | | 4.7 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.9 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.72** | **J** | 1.9 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.2** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.55** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.0** | | 1.9 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **12** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:17 | 05/01/21 09:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *69* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:04* | *1* |
| *13C5 PFPeA* | *60* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:04* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:04* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:04* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:04* | *1* |

## Client Sample ID: PWS1006-OS-042021-100
**Lab Sample ID: 320-72788-51**

**Date Collected: 04/20/21 18:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 PFDA | 84 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 PFUnA | 80 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 PFDoA | 82 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 PFTeDA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C3 PFBS | 76 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C8 FOSA | 90 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| M2-4:2 FTS | 92 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| M2-6:2 FTS | 101 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| M2-8:2 FTS | 83 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C2 10:2 FTS | 107 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| 13C3 HFPO-DA | 77 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d7-N-MeFOSE-M | 75 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |
| d9-N-EtFOSE-M | 72 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:04 | 1 |

## Client Sample ID: PWS-FD02-042012
**Lab Sample ID: 320-72788-53**

**Date Collected: 04/20/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.8** | **J** | 4.9 | 2.4 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.7** | | 2.0 | 0.48 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.1** | | 2.0 | 0.57 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.6** | **J** | 2.0 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.3** | | 2.0 | 0.84 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.72 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.92 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.90** | **J** | 2.0 | 0.20 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.81** | **J** | 2.0 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 2.0 | 0.56 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD02-042012**
**Lab Sample ID: 320-72788-53**
**Date Collected: 04/20/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.36 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.95 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.96 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NMeFOSA | ND | | 2.0 | 0.42 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NEtFOSA | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NMeFOSAA | ND | | 4.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NEtFOSAA | ND | | 4.9 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| NEtFOSE | ND | | 2.0 | 0.84 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| 6:2 FTS | ND | | 4.9 | 2.5 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.66 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.5 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| F-53B Minor | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.39 | ng/L | | 04/29/21 04:17 | 05/01/21 09:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C5 PFPeA* | *72* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C5 PFNA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFDA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFTeDA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *M2-4:2 FTS* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *M2-8:2 FTS* | *113* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C2 10:2 FTS* | *133* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *13C3 HFPO-DA* | *73* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d3-NMeFOSAA* | *97* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:13* | *1* |

## Client Sample ID: PWS1168-OS-042021-100

**Date Collected: 04/20/21 09:10**
**Date Received: 04/23/21 10:00**

## Lab Sample ID: 320-72788-54

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.7** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.8** | | 1.9 | 0.45 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.3** | | 1.9 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.7** | **J** | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.2** | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.99** | **J** | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.66** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **J** | 1.9 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.87** | **J** | 1.9 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 09:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:23* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:23* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:23* | *1* |
| *13C4 PFHpA* | *76* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:23* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:23* | *1* |

## Client Sample ID: PWS1168-OS-042021-100

**Lab Sample ID: 320-72788-54**

**Date Collected: 04/20/21 09:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 18O2 PFHxS | 84 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C4 PFOS | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| M2-4:2 FTS | 93 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| M2-6:2 FTS | 109 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| M2-8:2 FTS | 115 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C2 10:2 FTS | 132 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| 13C3 HFPO-DA | 71 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d3-NMeFOSAA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d5-NEtFOSAA | 88 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d7-N-MeFOSE-M | 76 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |
| d9-N-EtFOSE-M | 69 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 09:23 | 1 |

## Client Sample ID: PWS1179-OS-042021-100

**Lab Sample ID: 320-72788-56**

**Date Collected: 04/20/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.7 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.0** | | 1.9 | 0.46 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.9 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.82** | **J** | 1.9 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.9 | 0.53 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1179-OS-042021-100**
**Lab Sample ID: 320-72788-56**
**Date Collected: 04/20/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.50 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 09:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C5 PFPeA* | *70* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C4 PFOA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFDA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFDoA* | *79* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C3 PFBS* | *77* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *M2-4:2 FTS* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *M2-6:2 FTS* | *110* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *M2-8:2 FTS* | *115* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C2 10:2 FTS* | *115* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d5-NEtFOSAA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |
| *d9-N-EtFOSE-M* | *71* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 09:32* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1163-OS-042021-100**
**Date Collected: 04/20/21 11:35**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-58**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.1** | **J** | 4.5 | 2.1 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.60** | **J** | 1.8 | 0.44 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.52** | **J** | 1.8 | 0.52 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.76 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.9** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.48 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NMeFOSE | ND | | 3.6 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/29/21 04:17 | 05/01/21 10:00 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 10:00* | *1* |

## Client Sample ID: PWS1163-OS-042021-100
**Lab Sample ID: 320-72788-58**

**Date Collected: 04/20/21 11:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 102 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C2 PFDoA | 90 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 18O2 PFHxS | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C8 FOSA | 100 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| M2-4:2 FTS | 95 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| M2-6:2 FTS | 103 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d3-NMeFOSAA | 89 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d5-NEtFOSAA | 85 | | 25 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d-N-EtFOSA-M | 85 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d7-N-MeFOSE-M | 82 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 04/29/21 04:17 | 05/01/21 10:00 | 1 |

## Client Sample ID: PWS1183-OS-042021-100
**Lab Sample ID: 320-72788-60**

**Date Collected: 04/20/21 13:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.9** | | 4.5 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.0** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.52** | **J** | 1.8 | 0.27 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **J** | 1.8 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.19** | **J** | 1.8 | 0.17 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.7** | **I** | 1.8 | 0.49 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1183-OS-042021-100**
**Lab Sample ID: 320-72788-60**
**Date Collected: 04/20/21 13:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/29/21 04:31 | 05/05/21 08:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFTeDA* | *81* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 PFHxDA* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C4 PFOS* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *M2-4:2 FTS* | *111* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *M2-6:2 FTS* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *M2-8:2 FTS* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C2 10:2 FTS* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d3-NMeFOSAA* | *74* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d5-NEtFOSAA* | *65* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d-N-MeFOSA-M* | *65* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:29* | *1* |

## Client Sample ID: PWS-FD01-042121

**Date Collected: 04/21/21 12:01**
**Date Received: 04/23/21 10:00**

## Lab Sample ID: 320-72788-62

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.7** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.41** | **J** | 1.8 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.55** | **J** | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.31** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.95** | **J** | 1.8 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.8** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 08:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *66* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:38* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:38* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:38* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:38* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:38* | *1* |

## Client Sample ID: PWS-FD01-042121
**Lab Sample ID: 320-72788-62**
**Date Collected: 04/21/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 PFDoA | 81 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 PFTeDA | 80 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 PFHxDA | 84 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C4 PFOS | 78 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C8 FOSA | 82 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| M2-4:2 FTS | 113 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| M2-6:2 FTS | 83 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| M2-8:2 FTS | 70 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C2 10:2 FTS | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| 13C3 HFPO-DA | 79 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d3-NMeFOSAA | 61 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d5-NEtFOSAA | 61 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |
| d9-N-EtFOSE-M | 66 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:38 | 1 |

## Client Sample ID: PWS1031-OS-042121-100
**Lab Sample ID: 320-72788-63**
**Date Collected: 04/21/21 11:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **17** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.77** | **J** | 1.8 | 0.45 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.54** | **J** | 1.8 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.8 | 0.78 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.33** | **J** | 1.8 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.52** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.7** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.63** | **J** | 1.8 | 0.27 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.8** | | 1.8 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1031-OS-042121-100**
**Lab Sample ID: 320-72788-63**
**Date Collected: 04/21/21 11:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **5.7** | | 1.8 | 0.49 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 08:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *65* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFDA* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFDoA* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 PFHxDA* | *85* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C4 PFOS* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C8 FOSA* | *75* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *M2-4:2 FTS* | *120* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *M2-6:2 FTS* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *M2-8:2 FTS* | *61* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C2 10:2 FTS* | *67* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d3-NMeFOSAA* | *55* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d5-NEtFOSAA* | *57* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d-N-MeFOSA-M* | *71* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d7-N-MeFOSE-M* | *65* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |
| *d9-N-EtFOSE-M* | *64* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 08:47* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1032-OS-042121-100**
**Date Collected: 04/21/21 12:02**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-65**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.1** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.41** | **J** | 1.8 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.3** | **J** | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.9** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.91 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 08:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:56* | *1* |

## Client Sample ID: PWS1032-OS-042121-100
**Lab Sample ID: 320-72788-65**

**Date Collected: 04/21/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C2 PFUnA | 93 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C2 PFDoA | 84 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C2 PFTeDA | 82 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C3 PFBS | 71 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 18O2 PFHxS | 81 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C4 PFOS | 68 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C8 FOSA | 74 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| M2-4:2 FTS | 137 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| M2-6:2 FTS | 88 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| M2-8:2 FTS | 61 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C2 10:2 FTS | 74 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d3-NMeFOSAA | 60 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d5-NEtFOSAA | 54 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d7-N-MeFOSE-M | 69 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |
| d9-N-EtFOSE-M | 64 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:56 | 1 |

## Client Sample ID: PWS1038-OS-042121-100
**Lab Sample ID: 320-72788-67**

**Date Collected: 04/21/21 13:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.8** | | 4.9 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.48 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.46** | **J** | 1.9 | 0.26 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.71 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.2** | **J** | 1.9 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.2** | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1038-OS-042121-100**
**Date Collected: 04/21/21 13:30**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-67**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.94 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.95 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NMeFOSA | ND | | 1.9 | 0.42 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NMeFOSAA | ND | | 4.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NEtFOSAA | ND | | 4.9 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| NEtFOSE | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| 6:2 FTS | ND | | 4.9 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.45 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.5 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 04/29/21 04:31 | 05/05/21 09:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *66* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFUnA* | *84* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFDoA* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFTeDA* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 PFHxDA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C4 PFOS* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C8 FOSA* | *88* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *M2-4:2 FTS* | *122* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *M2-6:2 FTS* | *101* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *M2-8:2 FTS* | *93* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d3-NMeFOSAA* | *74* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d5-NEtFOSAA* | *67* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d-N-MeFOSA-M* | *69* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 09:23* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1043-OS-042121-100**
**Date Collected: 04/21/21 14:10**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-69**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **11** | | 4.7 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.47** | **J** | 1.9 | 0.26 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.9** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.2** | **J** | 1.9 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.7** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:31 | 05/05/21 09:33 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *64* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:33* | *1* |
| *13C5 PFPeA* | *70* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:33* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:33* | *1* |
| *13C4 PFHpA* | *86* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:33* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 09:33* | *1* |

## Client Sample ID: PWS1043-OS-042121-100
**Lab Sample ID: 320-72788-69**

**Date Collected: 04/21/21 14:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 PFDA | 81 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 PFDoA | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 PFTeDA | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 PFHxDA | 79 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C3 PFBS | 78 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C4 PFOS | 75 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C8 FOSA | 84 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| M2-4:2 FTS | 125 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| M2-6:2 FTS | 95 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| M2-8:2 FTS | 87 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C2 10:2 FTS | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| 13C3 HFPO-DA | 83 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d3-NMeFOSAA | 61 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d5-NEtFOSAA | 73 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 09:33 | 1 |

## Client Sample ID: PWS1035-OS-042121-100
**Lab Sample ID: 320-72788-71**

**Date Collected: 04/21/21 15:06**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.5** | **J** | 4.7 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.34** | **J** | 1.9 | 0.26 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.46** | **J** | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.4** | **J** | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1035-OS-042121-100**
**Lab Sample ID: 320-72788-71**
**Date Collected: 04/21/21 15:06**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.5** | **J** | 1.9 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:31 | 05/05/21 10:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *67* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 PFHxDA* | *85* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C3 PFBS* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *18O2 PFHxS* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C8 FOSA* | *85* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *M2-4:2 FTS* | *127* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *M2-8:2 FTS* | *99* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d3-NMeFOSAA* | *70* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d5-NEtFOSAA* | *69* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:09* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1040-OS-042121-100**
**Date Collected: 04/21/21 16:07**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-73**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **10** | | 4.7 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.41** | **J I** | 1.9 | 0.26 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.2** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.9 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.4** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:31 | 05/05/21 10:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:18* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:18* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:18* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:18* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:18* | *1* |

## Client Sample ID: PWS1040-OS-042121-100
**Lab Sample ID: 320-72788-73**

**Date Collected: 04/21/21 16:07**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 84 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 PFUnA | 84 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 PFDoA | 71 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 PFTeDA | 77 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 PFHxDA | 78 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 18O2 PFHxS | 81 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C4 PFOS | 75 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C8 FOSA | 81 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| M2-4:2 FTS | 119 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| M2-6:2 FTS | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| M2-8:2 FTS | 69 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C2 10:2 FTS | 73 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d3-NMeFOSAA | 62 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d5-NEtFOSAA | 59 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d-N-MeFOSA-M | 65 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |
| d9-N-EtFOSE-M | 62 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:18 | 1 |

## Client Sample ID: PWS1033-OS-042121-100
**Lab Sample ID: 320-72788-75**

**Date Collected: 04/21/21 17:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **9.8** | | 4.7 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.40** | **J** | 1.9 | 0.26 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.36** | **J** | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.7** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.31** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.9** | | 1.9 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1033-OS-042121-100**
**Lab Sample ID: 320-72788-75**
**Date Collected: 04/21/21 17:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **7.7** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 04:31 | 05/05/21 10:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *63* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C5 PFPeA* | *71* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFTeDA* | *75* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 PFHxDA* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *18O2 PFHxS* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C4 PFOS* | *71* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *M2-4:2 FTS* | *118* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *M2-6:2 FTS* | *83* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *M2-8:2 FTS* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C2 10:2 FTS* | *74* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *13C3 HFPO-DA* | *80* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d3-NMeFOSAA* | *68* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d5-NEtFOSAA* | *67* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d-N-MeFOSA-M* | *67* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d7-N-MeFOSE-M* | *81* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:27* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1007-OS-042121-100**
**Date Collected: 04/21/21 18:30**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-77**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **17** | | 5.0 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.8** | **J** | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.84** | **J** | 2.0 | 0.27 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.6** | | 2.0 | 0.20 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.39** | **J** | 2.0 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 2.0 | 0.57 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **10** | | 2.0 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 10:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:37* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:37* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:37* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:37* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:37* | *1* |

## Client Sample ID: PWS1007-OS-042121-100
**Lab Sample ID: 320-72788-77**

**Date Collected: 04/21/21 18:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 101 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 PFDA | 104 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 PFUnA | 96 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 PFTeDA | 91 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 PFHxDA | 92 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C8 FOSA | 92 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| M2-4:2 FTS | 131 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| M2-6:2 FTS | 105 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| M2-8:2 FTS | 96 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C2 10:2 FTS | 95 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d3-NMeFOSAA | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d5-NEtFOSAA | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d-N-EtFOSA-M | 74 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |
| d9-N-EtFOSE-M | 108 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:37 | 1 |

## Client Sample ID: PWS1184-OS-042121-100
**Lab Sample ID: 320-72788-79**

**Date Collected: 04/21/21 08:25**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.7** | | 4.6 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.82** | **J** | 1.8 | 0.45 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.8** | | 1.8 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.46** | **J** | 1.8 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.3** | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.5** | **J** | 1.8 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **37** | | 1.8 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1184-OS-042121-100**
**Date Collected: 04/21/21 08:25**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-79**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | | 1.8 | 0.50 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.91 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 10:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 PFHxDA* | *96* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C3 PFBS* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C8 FOSA* | *88* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *M2-4:2 FTS* | *114* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *M2-6:2 FTS* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *M2-8:2 FTS* | *61* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C2 10:2 FTS* | *79* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d3-NMeFOSAA* | *59* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d5-NEtFOSAA* | *63* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d7-N-MeFOSE-M* | *73* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |
| *d9-N-EtFOSE-M* | *71* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 10:46* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1153-OS-042121-100**
**Date Collected: 04/21/21 09:10**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-81**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | **J** | 2.0 | 0.20 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 2.0 | 0.57 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J** | 2.0 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 10:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:55* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:55* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:55* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:55* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 10:55* | *1* |

## Client Sample ID: PWS1153-OS-042121-100
**Lab Sample ID: 320-72788-81**

**Date Collected: 04/21/21 09:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 PFDA | 88 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 PFUnA | 88 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 PFDoA | 92 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 PFHxDA | 88 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C3 PFBS | 75 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 18O2 PFHxS | 78 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C4 PFOS | 74 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| M2-4:2 FTS | 83 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| M2-6:2 FTS | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| M2-8:2 FTS | 57 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C2 10:2 FTS | 70 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| 13C3 HFPO-DA | 83 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d3-NMeFOSAA | 58 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d5-NEtFOSAA | 54 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d-N-MeFOSA-M | 70 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d-N-EtFOSA-M | 70 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d7-N-MeFOSE-M | 69 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |
| d9-N-EtFOSE-M | 69 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 10:55 | 1 |

## Client Sample ID: PWS1145-OS-042121-100
**Lab Sample ID: 320-72788-83**

**Date Collected: 04/21/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.5** | | 4.7 | 2.2 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.4** | **J** | 1.9 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.8** | **J** | 1.9 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.6** | **J** | 1.9 | 0.23 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **8.9** | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.2** | | 1.9 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.80** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **10** | | 1.9 | 0.53 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.27** | **J I** | 1.9 | 0.18 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1145-OS-042121-100**
**Lab Sample ID: 320-72788-83**
**Date Collected: 04/21/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.9 | 0.51 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 11:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFTeDA* | *101* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 PFHxDA* | *101* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *M2-4:2 FTS* | *134* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *M2-6:2 FTS* | *96* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *M2-8:2 FTS* | *71* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C2 10:2 FTS* | *77* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d3-NMeFOSAA* | *65* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d5-NEtFOSAA* | *58* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d7-N-MeFOSE-M* | *73* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |
| *d9-N-EtFOSE-M* | *73* | | *10 - 150* | *04/29/21 04:31* | *05/05/21 11:04* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS-FD02-042121**
**Date Collected: 04/21/21 12:02**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-85**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.1** | | 4.7 | 2.3 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | **J** | 1.9 | 0.46 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.0** | | 1.9 | 0.55 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.9** | | 1.9 | 0.24 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **8.4** | | 1.9 | 0.80 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.2** | | 1.9 | 0.19 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.61** | **J** | 1.9 | 0.28 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **10** | | 1.9 | 0.54 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.51** | **J** | 1.9 | 0.18 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **14** | | 1.9 | 0.51 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.7** | | 1.9 | 0.93 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 04/29/21 12:13 | 05/05/21 00:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *74* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:23* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:23* | *1* |
| *13C2 PFHxA* | *82* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:23* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:23* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:23* | *1* |

## Client Sample ID: PWS-FD02-042121
**Lab Sample ID: 320-72788-85**

**Date Collected: 04/21/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 85 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 PFDA | 88 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 PFUnA | 90 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 PFDoA | 89 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 PFTeDA | 82 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C4 PFOS | 76 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C8 FOSA | 84 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| M2-4:2 FTS | 124 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| M2-6:2 FTS | 105 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| M2-8:2 FTS | 92 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C2 10:2 FTS | 75 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| 13C3 HFPO-DA | 88 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d3-NMeFOSAA | 66 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d5-NEtFOSAA | 70 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d-N-MeFOSA-M | 61 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d-N-EtFOSA-M | 56 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:23 | 1 |

## Client Sample ID: PWS1157-OS-042121-100
**Lab Sample ID: 320-72788-86**

**Date Collected: 04/21/21 14:00**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.6** | | 4.4 | 2.1 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.8** | | 1.8 | 0.43 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.0** | | 1.8 | 0.51 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.93** | **J** | 1.8 | 0.22 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.9** | | 1.8 | 0.75 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.1** | | 1.8 | 0.18 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.40** | **J** | 1.8 | 0.27 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **J** | 1.8 | 0.51 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.29** | **J** | 1.8 | 0.17 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1157-OS-042121-100**
**Lab Sample ID: 320-72788-86**
**Date Collected: 04/21/21 14:00**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.3** | | 1.8 | 0.48 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.8 | 0.87 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 04/29/21 12:13 | 05/05/21 00:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *18O2 PFHxS* | *80* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C4 PFOS* | *79* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C8 FOSA* | *81* | | *10 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *M2-4:2 FTS* | *117* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *M2-6:2 FTS* | *83* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *M2-8:2 FTS* | *76* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C2 10:2 FTS* | *72* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *13C3 HFPO-DA* | *91* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d3-NMeFOSAA* | *59* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d5-NEtFOSAA* | *65* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |
| *d9-N-EtFOSE-M* | *70* | | *10 - 150* | *04/29/21 12:13* | *05/05/21 00:32* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

**Client Sample ID: PWS1124-OS-042121-100**
**Date Collected: 04/21/21 16:20**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-88**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.60** | **J** | 1.8 | 0.53 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.98** | **J** | 1.8 | 0.77 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.72** | **J** | 1.8 | 0.18 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.79** | **J** | 1.8 | 0.52 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.4** | **J I** | 1.8 | 0.49 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **4.5** | | 1.8 | 0.89 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 04/29/21 12:13 | 05/05/21 00:42 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:42* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:42* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:42* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:42* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *04/29/21 12:13* | *05/05/21 00:42* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1124-OS-042121-100**
**Lab Sample ID: 320-72788-88**
**Date Collected: 04/21/21 16:20**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 86 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 PFDA | 86 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 PFUnA | 86 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 PFDoA | 91 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 PFTeDA | 94 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C3 PFBS | 82 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C8 FOSA | 81 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| M2-4:2 FTS | 73 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| M2-6:2 FTS | 75 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| M2-8:2 FTS | 56 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C2 10:2 FTS | 69 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d3-NMeFOSAA | 59 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d5-NEtFOSAA | 56 | | 25 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d-N-MeFOSA-M | 66 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d-N-EtFOSA-M | 54 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d7-N-MeFOSE-M | 71 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |
| d9-N-EtFOSE-M | 68 | | 10 - 150 | 04/29/21 12:13 | 05/05/21 00:42 | 1 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-72788-1 | PWS1008-OS-041921-100 | 71 | 67 | 78 | 81 | 89 | 95 | 89 | 92 |
| 320-72788-3 | PWS-FD01-041921 | 71 | 66 | 80 | 81 | 95 | 94 | 95 | 94 |
| 320-72788-4 | PWS1009-OS-041921-100 | 70 | 63 | 81 | 72 | 89 | 94 | 90 | 97 |
| 320-72788-6 | PWS1011-OS-041921-100 | 71 | 60 | 78 | 78 | 85 | 97 | 98 | 93 |
| 320-72788-8 | PWS1014-OS-041921-100 | 70 | 62 | 83 | 77 | 90 | 93 | 96 | 88 |
| 320-72788-10 | PWS1002-OS-041921-100 | 64 | 55 | 83 | 74 | 89 | 93 | 92 | 93 |
| 320-72788-12 | PWS1004-OS-041921-100 | 85 | 76 | 81 | 82 | 90 | 87 | 82 | 88 |
| 320-72788-12 MS | PWS-MS01-041921 | 88 | 76 | 84 | 81 | 88 | 87 | 83 | 88 |
| 320-72788-12 MSD | PWS-MSD01-041921 | 80 | 72 | 82 | 84 | 94 | 88 | 94 | 90 |
| 320-72788-14 | PWS1015-OS-041921-100 | 70 | 65 | 81 | 76 | 91 | 94 | 97 | 94 |
| 320-72788-16 | PWS1018-OS-041921-100 | 92 | 81 | 76 | 84 | 93 | 99 | 94 | 106 |
| 320-72788-18 | PWS1190-OS-041921-100 | 77 | 73 | 86 | 80 | 91 | 86 | 80 | 83 |
| 320-72788-20 | PWS1188-IS-041921-100 | 72 | 63 | 82 | 81 | 85 | 97 | 82 | 88 |
| 320-72788-22 | PWS1181-OS-041921-100 | 86 | 78 | 88 | 90 | 90 | 94 | 94 | 91 |
| 320-72788-24 | PWS1172-OS-041921-100 | 90 | 79 | 85 | 82 | 96 | 95 | 81 | 90 |
| 320-72788-26 | PWS1170-OS-041921-100 | 92 | 86 | 87 | 89 | 93 | 93 | 97 | 92 |
| 320-72788-28 | PWS1169-OS-041921-100 | 86 | 78 | 81 | 79 | 88 | 85 | 90 | 79 |
| 320-72788-30 | PWS1003-IS-042021-100 | 66 | 64 | 81 | 76 | 95 | 86 | 97 | 105 |
| 320-72788-32 | PWS1017-OS-042021-100 | 76 | 68 | 96 | 88 | 94 | 90 | 83 | 91 |
| 320-72788-34 | PWS1020-OS-042021-100 | 71 | 70 | 89 | 87 | 89 | 97 | 100 | 106 |
| 320-72788-36 | PWS-FD01-042021 | 76 | 67 | 82 | 77 | 90 | 92 | 89 | 95 |
| 320-72788-37 | PWS1024-OS-042021-100 | 82 | 75 | 82 | 82 | 95 | 89 | 94 | 101 |
| 320-72788-39 | PWS1027-OS-042021-100 | 82 | 74 | 84 | 79 | 90 | 89 | 89 | 90 |
| 320-72788-41 | PWS1021-OS-042021-100 | 84 | 71 | 79 | 83 | 86 | 87 | 87 | 85 |
| 320-72788-43 | PWS1022-OS-042021-100 | 68 | 65 | 74 | 77 | 91 | 87 | 87 | 93 |
| 320-72788-45 | PWS1025-OS-042021-100 | 72 | 67 | 79 | 77 | 86 | 94 | 91 | 92 |
| 320-72788-47 | PWS1026-OS-042021-100 | 78 | 69 | 84 | 77 | 91 | 88 | 88 | 89 |
| 320-72788-49 | PWS1028-OS-042021-100 | 62 | 58 | 72 | 70 | 83 | 89 | 77 | 87 |
| 320-72788-51 | PWS1006-OS-042021-100 | 69 | 60 | 79 | 77 | 90 | 89 | 84 | 80 |
| 320-72788-53 | PWS-FD02-042012 | 84 | 72 | 79 | 81 | 92 | 89 | 87 | 88 |
| 320-72788-54 | PWS1168-OS-042021-100 | 82 | 74 | 83 | 76 | 87 | 88 | 89 | 91 |
| 320-72788-56 | PWS1179-OS-042021-100 | 84 | 70 | 85 | 89 | 88 | 91 | 85 | 89 |
| 320-72788-56 MS | PWS-MS02-042021 | 85 | 77 | 86 | 83 | 92 | 90 | 89 | 91 |
| 320-72788-56 MSD | PWS-MSD02-042021 | 91 | 75 | 92 | 90 | 98 | 99 | 92 | 102 |
| 320-72788-58 | PWS1163-OS-042021-100 | 91 | 85 | 86 | 88 | 96 | 90 | 90 | 102 |
| 320-72788-60 | PWS1183-OS-042021-100 | 72 | 75 | 85 | 91 | 92 | 91 | 88 | 100 |
| 320-72788-62 | PWS-FD01-042121 | 66 | 80 | 88 | 89 | 94 | 85 | 82 | 92 |
| 320-72788-63 | PWS1031-OS-042121-100 | 65 | 77 | 91 | 94 | 91 | 88 | 80 | 88 |
| 320-72788-65 | PWS1032-OS-042121-100 | 62 | 75 | 86 | 88 | 94 | 90 | 85 | 93 |
| 320-72788-65 MS | PWS-MS01-042121 | 70 | 79 | 89 | 93 | 98 | 107 | 84 | 87 |
| 320-72788-65 MSD | PWS-MSD01-042121 | 62 | 70 | 83 | 90 | 92 | 92 | 83 | 81 |
| 320-72788-67 | PWS1038-OS-042121-100 | 66 | 77 | 87 | 92 | 95 | 88 | 89 | 84 |
| 320-72788-69 | PWS1043-OS-042121-100 | 64 | 70 | 87 | 86 | 99 | 90 | 81 | 87 |
| 320-72788-71 | PWS1035-OS-042121-100 | 67 | 75 | 87 | 92 | 92 | 91 | 94 | 88 |
| 320-72788-73 | PWS1040-OS-042121-100 | 70 | 77 | 93 | 90 | 91 | 84 | 82 | 84 |
| 320-72788-75 | PWS1033-OS-042121-100 | 63 | 71 | 85 | 88 | 91 | 88 | 86 | 89 |
| 320-72788-77 | PWS1007-OS-042121-100 | 76 | 82 | 96 | 91 | 102 | 101 | 104 | 96 |
| 320-72788-79 | PWS1184-OS-042121-100 | 86 | 91 | 97 | 103 | 94 | 93 | 88 | 89 |
| 320-72788-81 | PWS1153-OS-042121-100 | 81 | 83 | 84 | 92 | 85 | 85 | 88 | 88 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-72788-83 | PWS1145-OS-042121-100 | 82 | 88 | 100 | 94 | 95 | 103 | 86 | 92 |
| 320-72788-85 | PWS-FD02-042121 | 74 | 81 | 82 | 90 | 99 | 85 | 88 | 90 |
| 320-72788-86 | PWS1157-OS-042121-100 | 81 | 85 | 91 | 101 | 99 | 93 | 92 | 92 |
| 320-72788-88 | PWS1124-OS-042121-100 | 85 | 85 | 88 | 95 | 87 | 86 | 86 | 86 |
| LCS 320-484131/2-A | Lab Control Sample | 93 | 92 | 89 | 86 | 89 | 89 | 88 | 87 |
| LCS 320-484142/2-A | Lab Control Sample | 97 | 90 | 93 | 92 | 94 | 96 | 95 | 96 |
| LCS 320-484143/2-A | Lab Control Sample | 80 | 84 | 92 | 88 | 88 | 79 | 84 | 87 |
| LCS 320-484284/2-A | Lab Control Sample | 84 | 82 | 84 | 88 | 93 | 86 | 84 | 89 |
| LCSD 320-484284/3-A | Lab Control Sample Dup | 98 | 95 | 101 | 109 | 92 | 94 | 94 | 101 |
| MB 320-484131/1-A | Method Blank | 93 | 91 | 89 | 84 | 89 | 92 | 87 | 87 |
| MB 320-484142/1-A | Method Blank | 91 | 87 | 88 | 92 | 89 | 89 | 91 | 87 |
| MB 320-484143/1-A | Method Blank | 88 | 84 | 90 | 96 | 96 | 97 | 97 | 97 |
| MB 320-484284/1-A | Method Blank | 81 | 90 | 84 | 99 | 91 | 88 | 81 | 96 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72788-1 | PWS1008-OS-041921-100 | 88 | 83 | 102 | 80 | 86 | 91 | 96 | 95 |
| 320-72788-3 | PWS-FD01-041921 | 94 | 91 | 98 | 78 | 89 | 92 | 103 | 104 |
| 320-72788-4 | PWS1009-OS-041921-100 | 98 | 105 | 105 | 74 | 82 | 86 | 96 | 94 |
| 320-72788-6 | PWS1011-OS-041921-100 | 87 | 85 | 93 | 75 | 87 | 92 | 98 | 95 |
| 320-72788-8 | PWS1014-OS-041921-100 | 94 | 93 | 95 | 72 | 84 | 92 | 101 | 97 |
| 320-72788-10 | PWS1002-OS-041921-100 | 90 | 91 | 96 | 68 | 81 | 86 | 97 | 98 |
| 320-72788-12 | PWS1004-OS-041921-100 | 88 | 88 | 88 | 81 | 88 | 90 | 93 | 84 |
| 320-72788-12 MS | PWS-MS01-041921 | 86 | 92 | 90 | 82 | 87 | 86 | 84 | 83 |
| 320-72788-12 MSD | PWS-MSD01-041921 | 91 | 86 | 93 | 80 | 90 | 89 | 88 | 84 |
| 320-72788-14 | PWS1015-OS-041921-100 | 95 | 92 | 95 | 78 | 88 | 99 | 100 | 100 |
| 320-72788-16 | PWS1018-OS-041921-100 | 95 | 98 | 100 | 89 | 93 | 97 | 105 | 54 |
| 320-72788-18 | PWS1190-OS-041921-100 | 90 | 89 | 101 | 84 | 82 | 85 | 91 | 86 |
| 320-72788-20 | PWS1188-IS-041921-100 | 81 | 80 | 86 | 75 | 86 | 89 | 93 | 100 |
| 320-72788-22 | PWS1181-OS-041921-100 | 97 | 91 | 84 | 85 | 93 | 91 | 95 | 90 |
| 320-72788-24 | PWS1172-OS-041921-100 | 93 | 93 | 79 | 82 | 91 | 94 | 97 | 88 |
| 320-72788-26 | PWS1170-OS-041921-100 | 99 | 93 | 78 | 85 | 95 | 96 | 99 | 97 |
| 320-72788-28 | PWS1169-OS-041921-100 | 68 | 81 | 76 | 80 | 87 | 87 | 88 | 98 |
| 320-72788-30 | PWS1003-IS-042021-100 | 104 | 93 | 91 | 80 | 89 | 92 | 103 | 95 |
| 320-72788-32 | PWS1017-OS-042021-100 | 85 | 73 | 68 | 83 | 86 | 86 | 91 | 88 |
| 320-72788-34 | PWS1020-OS-042021-100 | 68 | 87 | 83 | 84 | 95 | 91 | 100 | 103 |
| 320-72788-36 | PWS-FD01-042021 | 93 | 94 | 94 | 80 | 83 | 86 | 99 | 101 |
| 320-72788-37 | PWS1024-OS-042021-100 | 96 | 93 | 99 | 79 | 89 | 90 | 101 | 95 |
| 320-72788-39 | PWS1027-OS-042021-100 | 91 | 95 | 100 | 88 | 84 | 90 | 91 | 81 |
| 320-72788-41 | PWS1021-OS-042021-100 | 86 | 88 | 93 | 74 | 81 | 87 | 91 | 80 |
| 320-72788-43 | PWS1022-OS-042021-100 | 93 | 97 | 104 | 70 | 82 | 83 | 92 | 84 |
| 320-72788-45 | PWS1025-OS-042021-100 | 94 | 94 | 99 | 72 | 88 | 81 | 88 | 88 |
| 320-72788-47 | PWS1026-OS-042021-100 | 93 | 95 | 100 | 73 | 83 | 88 | 89 | 91 |
| 320-72788-49 | PWS1028-OS-042021-100 | 86 | 88 | 98 | 71 | 80 | 82 | 91 | 85 |
| 320-72788-51 | PWS1006-OS-042021-100 | 82 | 88 | 94 | 76 | 83 | 86 | 90 | 92 |
| 320-72788-53 | PWS-FD02-042012 | 87 | 91 | 91 | 78 | 87 | 89 | 98 | 89 |
| 320-72788-54 | PWS1168-OS-042021-100 | 93 | 89 | 83 | 77 | 84 | 89 | 95 | 93 |
| 320-72788-56 | PWS1179-OS-042021-100 | 79 | 86 | 93 | 77 | 90 | 90 | 93 | 91 |
| 320-72788-56 MS | PWS-MS02-042021 | 88 | 92 | 92 | 81 | 89 | 87 | 100 | 88 |
| 320-72788-56 MSD | PWS-MSD02-042021 | 93 | 95 | 100 | 84 | 99 | 96 | 101 | 92 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72788-58 | PWS1163-OS-042021-100 | 90 | 97 | 93 | 84 | 89 | 90 | 100 | 95 |
| 320-72788-60 | PWS1183-OS-042021-100 | 90 | 81 | 79 | 80 | 84 | 76 | 82 | 111 |
| 320-72788-62 | PWS-FD01-042121 | 81 | 80 | 84 | 74 | 85 | 78 | 82 | 113 |
| 320-72788-63 | PWS1031-OS-042121-100 | 80 | 88 | 85 | 74 | 82 | 76 | 75 | 120 |
| 320-72788-65 | PWS1032-OS-042121-100 | 84 | 82 | 83 | 71 | 81 | 68 | 74 | 137 |
| 320-72788-65 MS | PWS-MS01-042121 | 88 | 82 | 96 | 71 | 83 | 81 | 84 | 138 |
| 320-72788-65 MSD | PWS-MSD01-042121 | 86 | 80 | 87 | 75 | 80 | 76 | 73 | 117 |
| 320-72788-67 | PWS1038-OS-042121-100 | 80 | 82 | 90 | 79 | 88 | 79 | 88 | 122 |
| 320-72788-69 | PWS1043-OS-042121-100 | 85 | 76 | 79 | 78 | 82 | 75 | 84 | 125 |
| 320-72788-71 | PWS1035-OS-042121-100 | 95 | 87 | 85 | 76 | 76 | 77 | 85 | 127 |
| 320-72788-73 | PWS1040-OS-042121-100 | 71 | 77 | 78 | 77 | 81 | 75 | 81 | 119 |
| 320-72788-75 | PWS1033-OS-042121-100 | 84 | 75 | 79 | 74 | 76 | 71 | 78 | 118 |
| 320-72788-77 | PWS1007-OS-042121-100 | 98 | 91 | 92 | 80 | 93 | 88 | 92 | 131 |
| 320-72788-79 | PWS1184-OS-042121-100 | 97 | 97 | 96 | 87 | 94 | 89 | 88 | 114 |
| 320-72788-81 | PWS1153-OS-042121-100 | 92 | 93 | 88 | 75 | 78 | 74 | 86 | 83 |
| 320-72788-83 | PWS1145-OS-042121-100 | 93 | 101 | 101 | 90 | 87 | 91 | 90 | 134 |
| 320-72788-85 | PWS-FD02-042121 | 89 | 82 | 83 | 84 | 82 | 76 | 84 | 124 |
| 320-72788-86 | PWS1157-OS-042121-100 | 94 | 90 | 95 | 79 | 80 | 79 | 81 | 117 |
| 320-72788-88 | PWS1124-OS-042121-100 | 91 | 94 | 94 | 82 | 83 | 77 | 81 | 73 |
| LCS 320-484131/2-A | Lab Control Sample | 83 | 75 | 77 | 85 | 90 | 91 | 89 | 92 |
| LCS 320-484142/2-A | Lab Control Sample | 98 | 92 | 91 | 90 | 92 | 93 | 97 | 106 |
| LCS 320-484143/2-A | Lab Control Sample | 90 | 87 | 87 | 76 | 83 | 69 | 77 | 73 |
| LCS 320-484284/2-A | Lab Control Sample | 104 | 77 | 83 | 74 | 78 | 73 | 78 | 68 |
| LCSD 320-484284/3-A | Lab Control Sample Dup | 115 | 101 | 102 | 95 | 88 | 80 | 85 | 76 |
| MB 320-484131/1-A | Method Blank | 83 | 84 | 83 | 89 | 92 | 91 | 90 | 98 |
| MB 320-484142/1-A | Method Blank | 88 | 87 | 84 | 86 | 91 | 84 | 93 | 102 |
| MB 320-484143/1-A | Method Blank | 101 | 92 | 86 | 85 | 78 | 77 | 86 | 76 |
| MB 320-484284/1-A | Method Blank | 93 | 93 | 88 | 83 | 87 | 74 | 77 | 71 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72788-1 | PWS1008-OS-041921-100 | 113 | 126 | 122 | 81 | 83 | 84 | 76 | 77 |
| 320-72788-3 | PWS-FD01-041921 | 104 | 124 | 180 *5+ | 79 | 93 | 87 | 79 | 74 |
| 320-72788-4 | PWS1009-OS-041921-100 | 110 | 107 | 136 | 76 | 95 | 102 | 82 | 84 |
| 320-72788-6 | PWS1011-OS-041921-100 | 105 | 107 | 112 | 73 | 89 | 82 | 76 | 73 |
| 320-72788-8 | PWS1014-OS-041921-100 | 104 | 127 | 129 | 70 | 88 | 88 | 80 | 76 |
| 320-72788-10 | PWS1002-OS-041921-100 | 104 | 101 | 115 | 74 | 96 | 96 | 84 | 85 |
| 320-72788-12 | PWS1004-OS-041921-100 | 90 | 100 | 153 *5+ | 74 | 84 | 87 | 75 | 79 |
| 320-72788-12 MS | PWS-MS01-041921 | 84 | 91 | 117 | 77 | 84 | 80 | 76 | 81 |
| 320-72788-12 MSD | PWS-MSD01-041921 | 96 | 100 | 120 | 74 | 86 | 81 | 79 | 84 |
| 320-72788-14 | PWS1015-OS-041921-100 | 116 | 109 | 141 | 75 | 82 | 90 | 75 | 76 |
| 320-72788-16 | PWS1018-OS-041921-100 | 107 | 104 | 133 | 92 | 94 | 92 | 92 | 84 |
| 320-72788-18 | PWS1190-OS-041921-100 | 93 | 105 | 119 | 78 | 84 | 85 | 78 | 73 |
| 320-72788-20 | PWS1188-IS-041921-100 | 109 | 108 | 135 | 72 | 86 | 91 | 80 | 75 |
| 320-72788-22 | PWS1181-OS-041921-100 | 102 | 117 | 146 | 81 | 90 | 90 | 86 | 82 |
| 320-72788-24 | PWS1172-OS-041921-100 | 90 | 110 | 130 | 86 | 86 | 90 | 81 | 86 |
| 320-72788-26 | PWS1170-OS-041921-100 | 109 | 126 | 167 *5+ | 87 | 91 | 93 | 82 | 86 |
| 320-72788-28 | PWS1169-OS-041921-100 | 119 | 167 *5+ | 142 | 80 | 73 | 79 | 52 | 63 |
| 320-72788-30 | PWS1003-IS-042021-100 | 98 | 132 | 179 *5+ | 85 | 98 | 99 | 80 | 88 |
| 320-72788-32 | PWS1017-OS-042021-100 | 99 | 101 | 90 | 80 | 86 | 89 | 72 | 71 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72788-34 | PWS1020-OS-042021-100 | 111 | 208 *5+ | 184 *5+ | 79 | 90 | 95 | 76 | 64 |
| 320-72788-36 | PWS-FD01-042021 | 111 | 100 | 106 | 76 | 87 | 92 | 85 | 81 |
| 320-72788-37 | PWS1024-OS-042021-100 | 108 | 100 | 117 | 75 | 101 | 97 | 79 | 83 |
| 320-72788-39 | PWS1027-OS-042021-100 | 105 | 91 | 109 | 85 | 89 | 88 | 82 | 86 |
| 320-72788-41 | PWS1021-OS-042021-100 | 99 | 79 | 99 | 73 | 87 | 84 | 74 | 78 |
| 320-72788-43 | PWS1022-OS-042021-100 | 101 | 96 | 104 | 74 | 84 | 92 | 72 | 73 |
| 320-72788-45 | PWS1025-OS-042021-100 | 111 | 99 | 107 | 77 | 89 | 91 | 75 | 79 |
| 320-72788-47 | PWS1026-OS-042021-100 | 106 | 103 | 98 | 79 | 87 | 87 | 77 | 79 |
| 320-72788-49 | PWS1028-OS-042021-100 | 103 | 92 | 108 | 74 | 87 | 88 | 80 | 78 |
| 320-72788-51 | PWS1006-OS-042021-100 | 101 | 83 | 107 | 77 | 84 | 80 | 81 | 77 |
| 320-72788-53 | PWS-FD02-042012 | 102 | 113 | 133 | 73 | 97 | 90 | 77 | 79 |
| 320-72788-54 | PWS1168-OS-042021-100 | 109 | 115 | 132 | 71 | 88 | 88 | 76 | 77 |
| 320-72788-56 | PWS1179-OS-042021-100 | 110 | 115 | 115 | 85 | 91 | 91 | 78 | 80 |
| 320-72788-56 MS | PWS-MS02-042021 | 106 | 127 | 117 | 76 | 85 | 92 | 83 | 78 |
| 320-72788-56 MSD | PWS-MSD02-042021 | 123 | 131 | 128 | 84 | 93 | 95 | 88 | 85 |
| 320-72788-58 | PWS1163-OS-042021-100 | 103 | 103 | 108 | 90 | 89 | 85 | 77 | 85 |
| 320-72788-60 | PWS1183-OS-042021-100 | 92 | 82 | 77 | 83 | 74 | 65 | 65 | 66 |
| 320-72788-62 | PWS-FD01-042121 | 83 | 70 | 76 | 79 | 61 | 61 | 73 | 73 |
| 320-72788-63 | PWS1031-OS-042121-100 | 79 | 61 | 67 | 82 | 55 | 57 | 71 | 66 |
| 320-72788-65 | PWS1032-OS-042121-100 | 88 | 61 | 74 | 80 | 60 | 54 | 69 | 64 |
| 320-72788-65 MS | PWS-MS01-042121 | 106 | 85 | 75 | 86 | 72 | 69 | 68 | 66 |
| 320-72788-65 MSD | PWS-MSD01-042121 | 96 | 82 | 74 | 81 | 65 | 64 | 67 | 62 |
| 320-72788-67 | PWS1038-OS-042121-100 | 101 | 93 | 78 | 83 | 74 | 67 | 69 | 71 |
| 320-72788-69 | PWS1043-OS-042121-100 | 95 | 87 | 76 | 83 | 61 | 73 | 69 | 66 |
| 320-72788-71 | PWS1035-OS-042121-100 | 109 | 99 | 82 | 82 | 70 | 69 | 66 | 67 |
| 320-72788-73 | PWS1040-OS-042121-100 | 85 | 69 | 73 | 86 | 62 | 59 | 65 | 64 |
| 320-72788-75 | PWS1033-OS-042121-100 | 83 | 82 | 74 | 80 | 68 | 67 | 67 | 65 |
| 320-72788-77 | PWS1007-OS-042121-100 | 105 | 96 | 95 | 97 | 76 | 76 | 76 | 74 |
| 320-72788-79 | PWS1184-OS-042121-100 | 79 | 61 | 79 | 93 | 59 | 63 | 72 | 70 |
| 320-72788-81 | PWS1153-OS-042121-100 | 76 | 57 | 70 | 83 | 58 | 54 | 70 | 70 |
| 320-72788-83 | PWS1145-OS-042121-100 | 96 | 71 | 77 | 90 | 65 | 58 | 72 | 80 |
| 320-72788-85 | PWS-FD02-042121 | 105 | 92 | 75 | 88 | 66 | 70 | 61 | 56 |
| 320-72788-86 | PWS1157-OS-042121-100 | 83 | 76 | 72 | 91 | 59 | 65 | 68 | 64 |
| 320-72788-88 | PWS1124-OS-042121-100 | 75 | 56 | 69 | 90 | 59 | 56 | 66 | 54 |
| LCS 320-484131/2-A | Lab Control Sample | 94 | 103 | 103 | 82 | 84 | 82 | 69 | 73 |
| LCS 320-484142/2-A | Lab Control Sample | 101 | 107 | 104 | 88 | 90 | 91 | 82 | 80 |
| LCS 320-484143/2-A | Lab Control Sample | 69 | 57 | 63 | 88 | 56 | 54 | 66 | 70 |
| LCS 320-484284/2-A | Lab Control Sample | 66 | 75 | 71 | 87 | 68 | 67 | 63 | 63 |
| LCSD 320-484284/3-A | Lab Control Sample Dup | 77 | 79 | 78 | 103 | 69 | 70 | 69 | 70 |
| MB 320-484131/1-A | Method Blank | 102 | 98 | 109 | 90 | 86 | 80 | 76 | 79 |
| MB 320-484142/1-A | Method Blank | 104 | 99 | 95 | 84 | 90 | 83 | 78 | 79 |
| MB 320-484143/1-A | Method Blank | 75 | 75 | 82 | 84 | 60 | 65 | 76 | 73 |
| MB 320-484284/1-A | Method Blank | 71 | 64 | 68 | 90 | 58 | 56 | 60 | 59 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | |
| 320-72788-1 | PWS1008-OS-041921-100 | 75 | 74 | | | | | | |
| 320-72788-3 | PWS-FD01-041921 | 76 | 74 | | | | | | |
| 320-72788-4 | PWS1009-OS-041921-100 | 83 | 75 | | | | | | |
| 320-72788-6 | PWS1011-OS-041921-100 | 79 | 72 | | | | | | |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | |
| 320-72788-8 | PWS1014-OS-041921-100 | 78 | 81 | | | | | | |
| 320-72788-10 | PWS1002-OS-041921-100 | 75 | 74 | | | | | | |
| 320-72788-12 | PWS1004-OS-041921-100 | 73 | 79 | | | | | | |
| 320-72788-12 MS | PWS-MS01-041921 | 75 | 79 | | | | | | |
| 320-72788-12 MSD | PWS-MSD01-041921 | 77 | 75 | | | | | | |
| 320-72788-14 | PWS1015-OS-041921-100 | 74 | 72 | | | | | | |
| 320-72788-16 | PWS1018-OS-041921-100 | 77 | 76 | | | | | | |
| 320-72788-18 | PWS1190-OS-041921-100 | 74 | 77 | | | | | | |
| 320-72788-20 | PWS1188-IS-041921-100 | 73 | 77 | | | | | | |
| 320-72788-22 | PWS1181-OS-041921-100 | 75 | 82 | | | | | | |
| 320-72788-24 | PWS1172-OS-041921-100 | 85 | 76 | | | | | | |
| 320-72788-26 | PWS1170-OS-041921-100 | 77 | 74 | | | | | | |
| 320-72788-28 | PWS1169-OS-041921-100 | 68 | 64 | | | | | | |
| 320-72788-30 | PWS1003-IS-042021-100 | 87 | 88 | | | | | | |
| 320-72788-32 | PWS1017-OS-042021-100 | 72 | 75 | | | | | | |
| 320-72788-34 | PWS1020-OS-042021-100 | 70 | 67 | | | | | | |
| 320-72788-36 | PWS-FD01-042021 | 83 | 77 | | | | | | |
| 320-72788-37 | PWS1024-OS-042021-100 | 77 | 84 | | | | | | |
| 320-72788-39 | PWS1027-OS-042021-100 | 85 | 85 | | | | | | |
| 320-72788-41 | PWS1021-OS-042021-100 | 83 | 79 | | | | | | |
| 320-72788-43 | PWS1022-OS-042021-100 | 82 | 80 | | | | | | |
| 320-72788-45 | PWS1025-OS-042021-100 | 85 | 75 | | | | | | |
| 320-72788-47 | PWS1026-OS-042021-100 | 76 | 78 | | | | | | |
| 320-72788-49 | PWS1028-OS-042021-100 | 72 | 76 | | | | | | |
| 320-72788-51 | PWS1006-OS-042021-100 | 75 | 72 | | | | | | |
| 320-72788-53 | PWS-FD02-042012 | 74 | 81 | | | | | | |
| 320-72788-54 | PWS1168-OS-042021-100 | 76 | 69 | | | | | | |
| 320-72788-56 | PWS1179-OS-042021-100 | 80 | 71 | | | | | | |
| 320-72788-56 MS | PWS-MS02-042021 | 78 | 72 | | | | | | |
| 320-72788-56 MSD | PWS-MSD02-042021 | 89 | 86 | | | | | | |
| 320-72788-58 | PWS1163-OS-042021-100 | 82 | 82 | | | | | | |
| 320-72788-60 | PWS1183-OS-042021-100 | 88 | 87 | | | | | | |
| 320-72788-62 | PWS-FD01-042121 | 73 | 66 | | | | | | |
| 320-72788-63 | PWS1031-OS-042121-100 | 65 | 64 | | | | | | |
| 320-72788-65 | PWS1032-OS-042121-100 | 69 | 64 | | | | | | |
| 320-72788-65 MS | PWS-MS01-042121 | 89 | 84 | | | | | | |
| 320-72788-65 MSD | PWS-MSD01-042121 | 85 | 82 | | | | | | |
| 320-72788-67 | PWS1038-OS-042121-100 | 85 | 86 | | | | | | |
| 320-72788-69 | PWS1043-OS-042121-100 | 83 | 83 | | | | | | |
| 320-72788-71 | PWS1035-OS-042121-100 | 88 | 81 | | | | | | |
| 320-72788-73 | PWS1040-OS-042121-100 | 73 | 62 | | | | | | |
| 320-72788-75 | PWS1033-OS-042121-100 | 81 | 84 | | | | | | |
| 320-72788-77 | PWS1007-OS-042121-100 | 97 | 108 | | | | | | |
| 320-72788-79 | PWS1184-OS-042121-100 | 73 | 71 | | | | | | |
| 320-72788-81 | PWS1153-OS-042121-100 | 69 | 69 | | | | | | |
| 320-72788-83 | PWS1145-OS-042121-100 | 73 | 73 | | | | | | |
| 320-72788-85 | PWS-FD02-042121 | 78 | 77 | | | | | | |
| 320-72788-86 | PWS1157-OS-042121-100 | 78 | 70 | | | | | | |
| 320-72788-88 | PWS1124-OS-042121-100 | 71 | 68 | | | | | | |
| LCS 320-484131/2-A | Lab Control Sample | 68 | 70 | | | | | | |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| LCS 320-484142/2-A | Lab Control Sample | 81 | 89 | | | | | | | | |
| LCS 320-484143/2-A | Lab Control Sample | 67 | 65 | | | | | | | | |
| LCS 320-484284/2-A | Lab Control Sample | 95 | 85 | | | | | | | | |
| LCSD 320-484284/3-A | Lab Control Sample Dup | 95 | 83 | | | | | | | | |
| MB 320-484131/1-A | Method Blank | 83 | 86 | | | | | | | | |
| MB 320-484142/1-A | Method Blank | 77 | 84 | | | | | | | | |
| MB 320-484143/1-A | Method Blank | 82 | 79 | | | | | | | | |
| MB 320-484284/1-A | Method Blank | 75 | 69 | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-484131/1-A**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/28/21 19:10 | 04/30/21 00:47 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *04/28/21 19:10* | *04/30/21 00:47* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-484131/1-A**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C2 PFDoA | 83 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C2 PFTeDA | 84 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 18O2 PFHxS | 92 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C4 PFOS | 91 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C8 FOSA | 90 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| M2-4:2 FTS | 98 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| M2-8:2 FTS | 98 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C2 10:2 FTS | 109 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |
| d9-N-EtFOSE-M | 86 | | 10 - 150 | 04/28/21 19:10 | 04/30/21 00:47 | 1 |

**Lab Sample ID: LCS 320-484131/2-A**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 39.8 | | ng/L | | 100 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 41.0 | | ng/L | | 102 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 45.4 | | ng/L | | 114 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.8 | | ng/L | | 107 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.5 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 35.7 | | ng/L | | 98 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484131/2-A**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 41.9 | | ng/L | | 110 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 37.4 | | ng/L | | 101 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 33.5 | | ng/L | | 87 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 36.7 | | ng/L | | 95 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 33.4 | | ng/L | | 86 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| NMeFOSA | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| NEtFOSA | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 |
| NMeFOSAA | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| NMeFOSE | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 |
| NEtFOSE | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 |
| 4:2 FTS | 37.4 | 39.1 | | ng/L | | 105 | 60 - 135 |
| 6:2 FTS | 37.9 | 38.9 | | ng/L | | 102 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.5 | | ng/L | | 106 | 60 - 135 |
| 10:2 FTS | 38.6 | 35.1 | | ng/L | | 91 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 45.8 | | ng/L | | 114 | 60 - 135 |
| F-53B Major | 37.3 | 37.7 | | ng/L | | 101 | 60 - 135 |
| F-53B Minor | 37.7 | 34.6 | | ng/L | | 92 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 38.8 | | ng/L | | 103 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* |
| *13C5 PFPeA* | *92* | | *25 - 150* |
| *13C2 PFHxA* | *89* | | *25 - 150* |
| *13C4 PFHpA* | *86* | | *25 - 150* |
| *13C4 PFOA* | *89* | | *25 - 150* |
| *13C5 PFNA* | *89* | | *25 - 150* |
| *13C2 PFDA* | *88* | | *25 - 150* |
| *13C2 PFUnA* | *87* | | *25 - 150* |
| *13C2 PFDoA* | *83* | | *25 - 150* |
| *13C2 PFTeDA* | *75* | | *25 - 150* |
| *13C2 PFHxDA* | *77* | | *25 - 150* |
| *13C3 PFBS* | *85* | | *25 - 150* |
| *18O2 PFHxS* | *90* | | *25 - 150* |
| *13C4 PFOS* | *91* | | *25 - 150* |
| *13C8 FOSA* | *89* | | *10 - 150* |
| *M2-4:2 FTS* | *92* | | *25 - 150* |
| *M2-6:2 FTS* | *94* | | *25 - 150* |
| *M2-8:2 FTS* | *103* | | *25 - 150* |
| *13C2 10:2 FTS* | *103* | | *25 - 150* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484131/2-A**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *82* | | *25 - 150* |
| *d-N-MeFOSA-M* | *69* | | *10 - 150* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *68* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *70* | | *10 - 150* |

**Lab Sample ID: 320-72788-12 MS**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: PWS-MS01-041921**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 25 | | 33.1 | 54.7 | | ng/L | | 90 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 1.2 | J | 33.1 | 36.3 | | ng/L | | 106 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 33.1 | 33.1 | | ng/L | | 95 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 33.1 | 37.1 | | ng/L | | 108 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 7.6 | | 33.1 | 41.7 | | ng/L | | 103 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 0.69 | J | 33.1 | 35.9 | | ng/L | | 106 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 33.1 | 35.0 | | ng/L | | 106 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.1 | 35.0 | | ng/L | | 105 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.1 | 33.9 | | ng/L | | 102 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.1 | 35.3 | | ng/L | | 107 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.1 | 33.1 | | ng/L | | 100 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.1 | 33.5 | | ng/L | | 101 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.1 | 37.2 | | ng/L | | 112 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 29.3 | 33.0 | | ng/L | | 106 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.38 | J | 31.1 | 34.1 | | ng/L | | 108 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 30.2 | 31.2 | | ng/L | | 97 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.38 | J | 31.6 | 34.7 | | ng/L | | 109 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 30.8 | 42.5 | | ng/L | | 97 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 31.8 | 27.2 | | ng/L | | 86 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.0 | 32.6 | | ng/L | | 102 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.1 | 34.8 | | ng/L | | 108 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 33.1 | 38.0 | | ng/L | | 115 | 70 - 130 |
| NMeFOSA | ND | | 33.1 | 35.4 | | ng/L | | 107 | 70 - 130 |
| NEtFOSA | ND | | 33.1 | 27.8 | | ng/L | | 84 | 70 - 130 |
| NMeFOSAA | ND | | 33.1 | 36.0 | | ng/L | | 109 | 70 - 130 |
| NEtFOSAA | ND | | 33.1 | 35.4 | | ng/L | | 107 | 70 - 130 |
| NMeFOSE | ND | | 33.1 | 34.6 | | ng/L | | 105 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-12 MS**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: PWS-MS01-041921**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 33.1 | 28.9 | | ng/L | | 87 | 70 - 130 |
| 4:2 FTS | ND | | 31.0 | 32.4 | | ng/L | | 105 | 70 - 130 |
| 6:2 FTS | ND | | 31.4 | 34.9 | | ng/L | | 111 | 70 - 130 |
| 8:2 FTS | ND | | 31.8 | 36.4 | | ng/L | | 115 | 70 - 130 |
| 10:2 FTS | ND | | 32.0 | 30.1 | | ng/L | | 94 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 33.1 | 37.7 | | ng/L | | 114 | 70 - 130 |
| F-53B Major | ND | | 30.9 | 31.0 | | ng/L | | 100 | 70 - 130 |
| F-53B Minor | ND | | 31.2 | 32.8 | | ng/L | | 105 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.2 | 29.8 | | ng/L | | 95 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* |
| *13C5 PFPeA* | *76* | | *25 - 150* |
| *13C2 PFHxA* | *84* | | *25 - 150* |
| *13C4 PFHpA* | *81* | | *25 - 150* |
| *13C4 PFOA* | *88* | | *25 - 150* |
| *13C5 PFNA* | *87* | | *25 - 150* |
| *13C2 PFDA* | *83* | | *25 - 150* |
| *13C2 PFUnA* | *88* | | *25 - 150* |
| *13C2 PFDoA* | *86* | | *25 - 150* |
| *13C2 PFTeDA* | *92* | | *25 - 150* |
| *13C2 PFHxDA* | *90* | | *25 - 150* |
| *13C3 PFBS* | *82* | | *25 - 150* |
| *18O2 PFHxS* | *87* | | *25 - 150* |
| *13C4 PFOS* | *86* | | *25 - 150* |
| *13C8 FOSA* | *84* | | *10 - 150* |
| *M2-4:2 FTS* | *83* | | *25 - 150* |
| *M2-6:2 FTS* | *84* | | *25 - 150* |
| *M2-8:2 FTS* | *91* | | *25 - 150* |
| *13C2 10:2 FTS* | *117* | | *25 - 150* |
| *13C3 HFPO-DA* | *77* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |
| *d5-NEtFOSAA* | *80* | | *25 - 150* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* |
| *d-N-EtFOSA-M* | *81* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *79* | | *10 - 150* |

**Lab Sample ID: 320-72788-12 MSD**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: PWS-MSD01-041921**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 25 | | 32.7 | 57.8 | | ng/L | | 101 | 70 - 130 | 6 | 30 |
| Perfluoropentanoic acid (PFPeA) | 1.2 | J | 32.7 | 38.6 | | ng/L | | 115 | 70 - 130 | 6 | 30 |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 32.7 | 35.1 | | ng/L | | 103 | 70 - 130 | 6 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 32.7 | 35.7 | | ng/L | | 106 | 70 - 130 | 4 | 30 |
| Perfluorooctanoic acid (PFOA) | 7.6 | | 32.7 | 40.0 | | ng/L | | 99 | 70 - 130 | 4 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-12 MSD**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: PWS-MSD01-041921**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | 0.69 | J | 32.7 | 33.5 | | ng/L | | 101 | 70 - 130 | 7 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 32.7 | 31.3 | | ng/L | | 96 | 70 - 130 | 11 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 32.7 | 31.6 | | ng/L | | 97 | 70 - 130 | 10 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 32.7 | 34.3 | | ng/L | | 105 | 70 - 130 | 1 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 32.7 | 34.4 | | ng/L | | 105 | 70 - 130 | 3 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 32.7 | 34.3 | | ng/L | | 105 | 70 - 130 | 3 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 32.7 | 32.2 | | ng/L | | 99 | 70 - 130 | 4 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 32.7 | 36.1 | | ng/L | | 110 | 70 - 130 | 3 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 28.9 | 32.1 | | ng/L | | 104 | 70 - 130 | 3 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.38 | J | 30.6 | 35.3 | | ng/L | | 114 | 70 - 130 | 4 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 29.7 | 31.5 | | ng/L | | 100 | 70 - 130 | 1 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.38 | J | 31.1 | 34.9 | | ng/L | | 111 | 70 - 130 | 0 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 30.3 | 42.4 | | ng/L | | 98 | 70 - 130 | 0 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 31.4 | 27.9 | | ng/L | | 89 | 70 - 130 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 31.5 | 32.3 | | ng/L | | 103 | 70 - 130 | 1 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 31.6 | 33.2 | | ng/L | | 105 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 32.7 | 36.8 | | ng/L | | 113 | 70 - 130 | 3 | 30 |
| NMeFOSA | ND | | 32.7 | 35.2 | | ng/L | | 108 | 70 - 130 | 0 | 30 |
| NEtFOSA | ND | | 32.7 | 29.5 | | ng/L | | 90 | 70 - 130 | 6 | 30 |
| NMeFOSAA | ND | | 32.7 | 35.2 | | ng/L | | 108 | 70 - 130 | 2 | 30 |
| NEtFOSAA | ND | | 32.7 | 38.4 | | ng/L | | 118 | 70 - 130 | 8 | 30 |
| NMeFOSE | ND | | 32.7 | 32.8 | | ng/L | | 101 | 70 - 130 | 5 | 30 |
| NEtFOSE | ND | | 32.7 | 33.0 | | ng/L | | 101 | 70 - 130 | 13 | 30 |
| 4:2 FTS | ND | | 30.5 | 29.0 | | ng/L | | 95 | 70 - 130 | 11 | 30 |
| 6:2 FTS | ND | | 31.0 | 32.1 | | ng/L | | 104 | 70 - 130 | 8 | 30 |
| 8:2 FTS | ND | | 31.3 | 33.3 | | ng/L | | 107 | 70 - 130 | 9 | 30 |
| 10:2 FTS | ND | | 31.5 | 30.4 | | ng/L | | 97 | 70 - 130 | 1 | 30 |
| HFPO-DA (GenX) | ND | | 32.7 | 37.8 | | ng/L | | 116 | 70 - 130 | 0 | 30 |
| F-53B Major | ND | | 30.4 | 31.2 | | ng/L | | 103 | 70 - 130 | 1 | 30 |
| F-53B Minor | ND | | 30.8 | 31.5 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 30.8 | 28.7 | | ng/L | | 93 | 70 - 130 | 4 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* |
| *13C5 PFPeA* | *72* | | *25 - 150* |
| *13C2 PFHxA* | *82* | | *25 - 150* |
| *13C4 PFHpA* | *84* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-12 MSD**
**Matrix: Water**
**Analysis Batch: 484550**

**Client Sample ID: PWS-MSD01-041921**
**Prep Type: Total/NA**
**Prep Batch: 484131**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C4 PFOA | 94 | | 25 - 150 |
| 13C5 PFNA | 88 | | 25 - 150 |
| 13C2 PFDA | 94 | | 25 - 150 |
| 13C2 PFUnA | 90 | | 25 - 150 |
| 13C2 PFDoA | 91 | | 25 - 150 |
| 13C2 PFTeDA | 86 | | 25 - 150 |
| 13C2 PFHxDA | 93 | | 25 - 150 |
| 13C3 PFBS | 80 | | 25 - 150 |
| 18O2 PFHxS | 90 | | 25 - 150 |
| 13C4 PFOS | 89 | | 25 - 150 |
| 13C8 FOSA | 88 | | 10 - 150 |
| M2-4:2 FTS | 84 | | 25 - 150 |
| M2-6:2 FTS | 96 | | 25 - 150 |
| M2-8:2 FTS | 100 | | 25 - 150 |
| 13C2 10:2 FTS | 120 | | 25 - 150 |
| 13C3 HFPO-DA | 74 | | 25 - 150 |
| d3-NMeFOSAA | 86 | | 25 - 150 |
| d5-NEtFOSAA | 81 | | 25 - 150 |
| d-N-MeFOSA-M | 79 | | 10 - 150 |
| d-N-EtFOSA-M | 84 | | 10 - 150 |
| d7-N-MeFOSE-M | 77 | | 10 - 150 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 |

**Lab Sample ID: MB 320-484142/1-A**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-484142/1-A**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/29/21 04:17 | 05/01/21 07:01 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C5 PFNA* | *89* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFDoA* | *88* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 PFHxDA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C3 PFBS* | *86* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *18O2 PFHxS* | *91* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *M2-4:2 FTS* | *102* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *M2-6:2 FTS* | *104* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *M2-8:2 FTS* | *99* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C2 10:2 FTS* | *95* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d3-NMeFOSAA* | *90* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d5-NEtFOSAA* | *83* | | *25 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* | *04/29/21 04:17* | *05/01/21 07:01* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484142/2-A**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 41.0 | | ng/L | | 102 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.4 | | ng/L | | 106 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.3 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 39.6 | | ng/L | | 109 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 42.2 | | ng/L | | 111 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.7 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.1 | | ng/L | | 97 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 39.6 | | ng/L | | 103 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 39.4 | | ng/L | | 102 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| NMeFOSA | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| NEtFOSA | 40.0 | 39.8 | | ng/L | | 99 | 60 - 135 |
| NMeFOSAA | 40.0 | 46.8 | | ng/L | | 117 | 60 - 135 |
| NEtFOSAA | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| NMeFOSE | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| NEtFOSE | 40.0 | 41.4 | | ng/L | | 104 | 60 - 135 |
| 4:2 FTS | 37.4 | 38.3 | | ng/L | | 103 | 60 - 135 |
| 6:2 FTS | 37.9 | 39.2 | | ng/L | | 103 | 60 - 135 |
| 8:2 FTS | 38.3 | 42.5 | | ng/L | | 111 | 60 - 135 |
| 10:2 FTS | 38.6 | 37.2 | | ng/L | | 96 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 |
| F-53B Major | 37.3 | 39.0 | | ng/L | | 105 | 60 - 135 |
| F-53B Minor | 37.7 | 37.1 | | ng/L | | 99 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 39.4 | | ng/L | | 104 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 97 | | 25 - 150 |
| 13C5 PFPeA | 90 | | 25 - 150 |
| 13C2 PFHxA | 93 | | 25 - 150 |
| 13C4 PFHpA | 92 | | 25 - 150 |
| 13C4 PFOA | 94 | | 25 - 150 |
| 13C5 PFNA | 96 | | 25 - 150 |
| 13C2 PFDA | 95 | | 25 - 150 |
| 13C2 PFUnA | 96 | | 25 - 150 |
| 13C2 PFDoA | 98 | | 25 - 150 |
| 13C2 PFTeDA | 92 | | 25 - 150 |
| 13C2 PFHxDA | 91 | | 25 - 150 |
| 13C3 PFBS | 90 | | 25 - 150 |
| 18O2 PFHxS | 92 | | 25 - 150 |
| 13C4 PFOS | 93 | | 25 - 150 |
| 13C8 FOSA | 97 | | 10 - 150 |
| M2-4:2 FTS | 106 | | 25 - 150 |
| M2-6:2 FTS | 101 | | 25 - 150 |
| M2-8:2 FTS | 107 | | 25 - 150 |
| 13C2 10:2 FTS | 104 | | 25 - 150 |
| 13C3 HFPO-DA | 88 | | 25 - 150 |
| d3-NMeFOSAA | 90 | | 25 - 150 |
| d5-NEtFOSAA | 91 | | 25 - 150 |
| d-N-MeFOSA-M | 82 | | 10 - 150 |
| d-N-EtFOSA-M | 80 | | 10 - 150 |
| d7-N-MeFOSE-M | 81 | | 10 - 150 |
| d9-N-EtFOSE-M | 89 | | 10 - 150 |

**Lab Sample ID: 320-72788-56 MS**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: PWS-MS02-042021**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 37.0 | 37.8 | | ng/L | | 95 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 2.0 | | 37.0 | 42.0 | | ng/L | | 108 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 37.0 | 38.1 | | ng/L | | 99 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 37.0 | 39.7 | | ng/L | | 107 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | ND | | 37.0 | 38.8 | | ng/L | | 105 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 37.0 | 40.1 | | ng/L | | 108 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.0 | 39.8 | | ng/L | | 108 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.0 | 42.1 | | ng/L | | 114 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.0 | 40.1 | | ng/L | | 108 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.0 | 37.1 | | ng/L | | 100 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.0 | 39.2 | | ng/L | | 106 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.0 | 40.2 | | ng/L | | 108 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.0 | 41.1 | | ng/L | | 111 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 0.82 | J | 32.7 | 37.6 | | ng/L | | 112 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-56 MS**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: PWS-MS02-042021**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 34.7 | 38.3 | | ng/L | | 110 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 33.7 | 36.3 | | ng/L | | 103 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 35.3 | 40.5 | | ng/L | | 115 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 34.4 | 36.5 | | ng/L | | 106 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.6 | 34.4 | | ng/L | | 97 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.7 | 39.0 | | ng/L | | 109 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.9 | 38.5 | | ng/L | | 107 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.0 | 38.6 | | ng/L | | 104 | 70 - 130 |
| NMeFOSA | ND | | 37.0 | 36.2 | | ng/L | | 98 | 70 - 130 |
| NEtFOSA | ND | | 37.0 | 37.6 | | ng/L | | 102 | 70 - 130 |
| NMeFOSAA | ND | | 37.0 | 43.7 | | ng/L | | 118 | 70 - 130 |
| NEtFOSAA | ND | | 37.0 | 42.8 | | ng/L | | 115 | 70 - 130 |
| NMeFOSE | ND | | 37.0 | 33.7 | | ng/L | | 91 | 70 - 130 |
| NEtFOSE | ND | | 37.0 | 40.3 | | ng/L | | 109 | 70 - 130 |
| 4:2 FTS | ND | | 34.6 | 41.2 | | ng/L | | 119 | 70 - 130 |
| 6:2 FTS | ND | | 35.1 | 39.1 | | ng/L | | 111 | 70 - 130 |
| 8:2 FTS | ND | | 35.5 | 39.8 | | ng/L | | 112 | 70 - 130 |
| 10:2 FTS | ND | | 35.7 | 32.4 | | ng/L | | 91 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 37.0 | 45.7 | | ng/L | | 123 | 70 - 130 |
| F-53B Major | ND | | 34.5 | 39.1 | | ng/L | | 113 | 70 - 130 |
| F-53B Minor | ND | | 34.9 | 38.8 | | ng/L | | 111 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.9 | 35.1 | | ng/L | | 100 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* |
| *13C5 PFPeA* | *77* | | *25 - 150* |
| *13C2 PFHxA* | *86* | | *25 - 150* |
| *13C4 PFHpA* | *83* | | *25 - 150* |
| *13C4 PFOA* | *92* | | *25 - 150* |
| *13C5 PFNA* | *90* | | *25 - 150* |
| *13C2 PFDA* | *89* | | *25 - 150* |
| *13C2 PFUnA* | *91* | | *25 - 150* |
| *13C2 PFDoA* | *88* | | *25 - 150* |
| *13C2 PFTeDA* | *92* | | *25 - 150* |
| *13C2 PFHxDA* | *92* | | *25 - 150* |
| *13C3 PFBS* | *81* | | *25 - 150* |
| *18O2 PFHxS* | *89* | | *25 - 150* |
| *13C4 PFOS* | *87* | | *25 - 150* |
| *13C8 FOSA* | *100* | | *10 - 150* |
| *M2-4:2 FTS* | *88* | | *25 - 150* |
| *M2-6:2 FTS* | *106* | | *25 - 150* |
| *M2-8:2 FTS* | *127* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-56 MS**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: PWS-MS02-042021**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 117 | | 25 - 150 |
| 13C3 HFPO-DA | 76 | | 25 - 150 |
| d3-NMeFOSAA | 85 | | 25 - 150 |
| d5-NEtFOSAA | 92 | | 25 - 150 |
| d-N-MeFOSA-M | 83 | | 10 - 150 |
| d-N-EtFOSA-M | 78 | | 10 - 150 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 |
| d9-N-EtFOSE-M | 72 | | 10 - 150 |

**Lab Sample ID: 320-72788-56 MSD**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: PWS-MSD02-042021**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 36.6 | 42.1 | | ng/L | | 108 | 70 - 130 | 11 | 30 |
| Perfluoropentanoic acid (PFPeA) | 2.0 | | 36.6 | 42.2 | | ng/L | | 110 | 70 - 130 | 1 | 30 |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 36.6 | 40.9 | | ng/L | | 108 | 70 - 130 | 7 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 36.6 | 39.0 | | ng/L | | 107 | 70 - 130 | 2 | 30 |
| Perfluorooctanoic acid (PFOA) | ND | | 36.6 | 39.3 | | ng/L | | 107 | 70 - 130 | 1 | 30 |
| Perfluorononanoic acid (PFNA) | ND | | 36.6 | 40.5 | | ng/L | | 111 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.6 | 40.8 | | ng/L | | 112 | 70 - 130 | 2 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.6 | 39.2 | | ng/L | | 107 | 70 - 130 | 7 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.6 | 39.3 | | ng/L | | 107 | 70 - 130 | 2 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.6 | 40.1 | | ng/L | | 110 | 70 - 130 | 8 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.6 | 38.6 | | ng/L | | 105 | 70 - 130 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.6 | 41.9 | | ng/L | | 115 | 70 - 130 | 4 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.6 | 42.7 | | ng/L | | 117 | 70 - 130 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 0.82 | J | 32.3 | 35.2 | | ng/L | | 106 | 70 - 130 | 6 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 34.3 | 41.2 | | ng/L | | 120 | 70 - 130 | 7 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 33.3 | 36.1 | | ng/L | | 103 | 70 - 130 | 1 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 34.8 | 39.8 | | ng/L | | 114 | 70 - 130 | 2 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 34.0 | 36.8 | | ng/L | | 108 | 70 - 130 | 1 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.1 | 32.0 | | ng/L | | 91 | 70 - 130 | 7 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.3 | 39.7 | | ng/L | | 113 | 70 - 130 | 2 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.4 | 37.9 | | ng/L | | 107 | 70 - 130 | 2 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 36.6 | 41.5 | | ng/L | | 113 | 70 - 130 | 7 | 30 |
| NMeFOSA | ND | | 36.6 | 40.7 | | ng/L | | 111 | 70 - 130 | 12 | 30 |
| NEtFOSA | ND | | 36.6 | 38.0 | | ng/L | | 104 | 70 - 130 | 1 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-56 MSD**
**Matrix: Water**
**Analysis Batch: 484863**

**Client Sample ID: PWS-MSD02-042021**
**Prep Type: Total/NA**
**Prep Batch: 484142**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NMeFOSAA | ND | | 36.6 | 43.0 | | ng/L | | 117 | 70 - 130 | 2 | 30 |
| NEtFOSAA | ND | | 36.6 | 41.3 | | ng/L | | 113 | 70 - 130 | 4 | 30 |
| NMeFOSE | ND | | 36.6 | 33.7 | | ng/L | | 92 | 70 - 130 | 0 | 30 |
| NEtFOSE | ND | | 36.6 | 38.3 | | ng/L | | 105 | 70 - 130 | 5 | 30 |
| 4:2 FTS | ND | | 34.2 | 38.2 | | ng/L | | 112 | 70 - 130 | 8 | 30 |
| 6:2 FTS | ND | | 34.7 | 34.8 | | ng/L | | 100 | 70 - 130 | 12 | 30 |
| 8:2 FTS | ND | | 35.1 | 41.5 | | ng/L | | 118 | 70 - 130 | 4 | 30 |
| 10:2 FTS | ND | | 35.3 | 33.5 | | ng/L | | 95 | 70 - 130 | 3 | 30 |
| HFPO-DA (GenX) | ND | | 36.6 | 42.7 | | ng/L | | 117 | 70 - 130 | 7 | 30 |
| F-53B Major | ND | | 34.1 | 37.5 | | ng/L | | 110 | 70 - 130 | 4 | 30 |
| F-53B Minor | ND | | 34.5 | 38.5 | | ng/L | | 112 | 70 - 130 | 1 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.5 | 32.9 | | ng/L | | 96 | 70 - 130 | 6 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* |
| *13C5 PFPeA* | *75* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *90* | | *25 - 150* |
| *13C4 PFOA* | *98* | | *25 - 150* |
| *13C5 PFNA* | *99* | | *25 - 150* |
| *13C2 PFDA* | *92* | | *25 - 150* |
| *13C2 PFUnA* | *102* | | *25 - 150* |
| *13C2 PFDoA* | *93* | | *25 - 150* |
| *13C2 PFTeDA* | *95* | | *25 - 150* |
| *13C2 PFHxDA* | *100* | | *25 - 150* |
| *13C3 PFBS* | *84* | | *25 - 150* |
| *18O2 PFHxS* | *99* | | *25 - 150* |
| *13C4 PFOS* | *96* | | *25 - 150* |
| *13C8 FOSA* | *101* | | *10 - 150* |
| *M2-4:2 FTS* | *92* | | *25 - 150* |
| *M2-6:2 FTS* | *123* | | *25 - 150* |
| *M2-8:2 FTS* | *131* | | *25 - 150* |
| *13C2 10:2 FTS* | *128* | | *25 - 150* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* |
| *d5-NEtFOSAA* | *95* | | *25 - 150* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* |
| *d-N-EtFOSA-M* | *85* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *89* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* |

**Lab Sample ID: MB 320-484143/1-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-484143/1-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/29/21 04:31 | 05/05/21 08:10 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *04/29/21 04:31* | *05/05/21 08:10* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-484143/1-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 101 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C2 PFTeDA | 92 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 18O2 PFHxS | 78 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| M2-4:2 FTS | 76 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| M2-6:2 FTS | 75 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| M2-8:2 FTS | 75 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| 13C3 HFPO-DA | 84 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d3-NMeFOSAA | 60 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d5-NEtFOSAA | 65 | | 25 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d7-N-MeFOSE-M | 82 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |
| d9-N-EtFOSE-M | 79 | | 10 - 150 | 04/29/21 04:31 | 05/05/21 08:10 | 1 |

**Lab Sample ID: LCS 320-484143/2-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 37.7 | | ng/L | | 94 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 37.5 | | ng/L | | 94 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 48.9 | | ng/L | | 122 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.5 | | ng/L | | 109 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 40.7 | | ng/L | | 108 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.5 | | ng/L | | 95 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 42.5 | | ng/L | | 112 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484143/2-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 41.4 | | ng/L | | 112 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.9 | | ng/L | | 104 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 41.9 | | ng/L | | 109 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 43.6 | | ng/L | | 113 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 |
| NMeFOSA | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 |
| NEtFOSA | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| NMeFOSAA | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| NEtFOSAA | 40.0 | 46.7 | | ng/L | | 117 | 60 - 135 |
| NMeFOSE | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 |
| NEtFOSE | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 |
| 4:2 FTS | 37.4 | 38.0 | | ng/L | | 102 | 60 - 135 |
| 6:2 FTS | 37.9 | 41.6 | | ng/L | | 110 | 60 - 135 |
| 8:2 FTS | 38.3 | 45.9 | | ng/L | | 120 | 60 - 135 |
| 10:2 FTS | 38.6 | 38.6 | | ng/L | | 100 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 |
| F-53B Major | 37.3 | 47.3 | | ng/L | | 127 | 60 - 135 |
| F-53B Minor | 37.7 | 45.7 | | ng/L | | 121 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 49.5 | | ng/L | | 131 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* |
| *13C5 PFPeA* | *84* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *88* | | *25 - 150* |
| *13C4 PFOA* | *88* | | *25 - 150* |
| *13C5 PFNA* | *79* | | *25 - 150* |
| *13C2 PFDA* | *84* | | *25 - 150* |
| *13C2 PFUnA* | *87* | | *25 - 150* |
| *13C2 PFDoA* | *90* | | *25 - 150* |
| *13C2 PFTeDA* | *87* | | *25 - 150* |
| *13C2 PFHxDA* | *87* | | *25 - 150* |
| *13C3 PFBS* | *76* | | *25 - 150* |
| *18O2 PFHxS* | *83* | | *25 - 150* |
| *13C4 PFOS* | *69* | | *25 - 150* |
| *13C8 FOSA* | *77* | | *10 - 150* |
| *M2-4:2 FTS* | *73* | | *25 - 150* |
| *M2-6:2 FTS* | *69* | | *25 - 150* |
| *M2-8:2 FTS* | *57* | | *25 - 150* |
| *13C2 10:2 FTS* | *63* | | *25 - 150* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* |
| *d3-NMeFOSAA* | *56* | | *25 - 150* |
| *d5-NEtFOSAA* | *54* | | *25 - 150* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484143/2-A**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d-N-EtFOSA-M* | *70* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *67* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *65* | | *10 - 150* |

**Lab Sample ID: 320-72788-65 MS**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: PWS-MS01-042121**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.1 | | 37.6 | 42.2 | | ng/L | | 96 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | ND | | 37.6 | 42.7 | | ng/L | | 113 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | ND | | 37.6 | 37.2 | | ng/L | | 99 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 37.6 | 38.2 | | ng/L | | 102 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | ND | | 37.6 | 36.9 | | ng/L | | 98 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 0.41 | J | 37.6 | 34.6 | | ng/L | | 91 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.6 | 42.0 | | ng/L | | 112 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.6 | 41.8 | | ng/L | | 111 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.6 | 40.0 | | ng/L | | 106 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.6 | 36.1 | | ng/L | | 96 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.6 | 41.7 | | ng/L | | 111 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.6 | 39.8 | | ng/L | | 106 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.6 | 45.4 | | ng/L | | 121 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 33.3 | 35.7 | | ng/L | | 103 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 35.3 | 42.5 | | ng/L | | 121 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 34.2 | 35.9 | | ng/L | | 105 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 35.8 | 38.6 | | ng/L | | 108 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | | 34.9 | 38.2 | | ng/L | | 101 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 36.1 | 33.5 | | ng/L | | 93 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 36.3 | 36.4 | | ng/L | | 100 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.4 | 34.4 | | ng/L | | 94 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.6 | 40.7 | | ng/L | | 108 | 70 - 130 |
| NMeFOSA | ND | | 37.6 | 37.9 | | ng/L | | 101 | 70 - 130 |
| NEtFOSA | ND | | 37.6 | 39.8 | | ng/L | | 106 | 70 - 130 |
| NMeFOSAA | ND | | 37.6 | 39.6 | | ng/L | | 105 | 70 - 130 |
| NEtFOSAA | ND | | 37.6 | 42.1 | | ng/L | | 112 | 70 - 130 |
| NMeFOSE | ND | | 37.6 | 39.4 | | ng/L | | 105 | 70 - 130 |
| NEtFOSE | ND | | 37.6 | 36.1 | | ng/L | | 96 | 70 - 130 |
| 4:2 FTS | ND | | 35.2 | 38.3 | | ng/L | | 109 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-65 MS**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: PWS-MS01-042121**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 6:2 FTS | ND | | 35.7 | 37.0 | | ng/L | | 104 | 70 - 130 |
| 8:2 FTS | ND | | 36.1 | 38.4 | | ng/L | | 106 | 70 - 130 |
| 10:2 FTS | ND | | 36.3 | 32.6 | | ng/L | | 90 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 37.6 | 38.9 | | ng/L | | 103 | 70 - 130 |
| F-53B Major | ND | | 35.1 | 36.7 | | ng/L | | 105 | 70 - 130 |
| F-53B Minor | ND | | 35.5 | 36.0 | | ng/L | | 102 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.5 | 40.8 | | ng/L | | 115 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* |
| *13C5 PFPeA* | *79* | | *25 - 150* |
| *13C2 PFHxA* | *89* | | *25 - 150* |
| *13C4 PFHpA* | *93* | | *25 - 150* |
| *13C4 PFOA* | *98* | | *25 - 150* |
| *13C5 PFNA* | *107* | | *25 - 150* |
| *13C2 PFDA* | *84* | | *25 - 150* |
| *13C2 PFUnA* | *87* | | *25 - 150* |
| *13C2 PFDoA* | *88* | | *25 - 150* |
| *13C2 PFTeDA* | *82* | | *25 - 150* |
| *13C2 PFHxDA* | *96* | | *25 - 150* |
| *13C3 PFBS* | *71* | | *25 - 150* |
| *18O2 PFHxS* | *83* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *84* | | *10 - 150* |
| *M2-4:2 FTS* | *138* | | *25 - 150* |
| *M2-6:2 FTS* | *106* | | *25 - 150* |
| *M2-8:2 FTS* | *85* | | *25 - 150* |
| *13C2 10:2 FTS* | *75* | | *25 - 150* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* |
| *d3-NMeFOSAA* | *72* | | *25 - 150* |
| *d5-NEtFOSAA* | *69* | | *25 - 150* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *89* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* |

**Lab Sample ID: 320-72788-65 MSD**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: PWS-MSD01-042121**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.1 | | 37.8 | 42.4 | | ng/L | | 96 | 70 - 130 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | ND | | 37.8 | 39.2 | | ng/L | | 104 | 70 - 130 | 8 | 30 |
| Perfluorohexanoic acid (PFHxA) | ND | | 37.8 | 36.6 | | ng/L | | 97 | 70 - 130 | 2 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 37.8 | 36.1 | | ng/L | | 96 | 70 - 130 | 6 | 30 |
| Perfluorooctanoic acid (PFOA) | ND | | 37.8 | 36.8 | | ng/L | | 97 | 70 - 130 | 0 | 30 |
| Perfluorononanoic acid (PFNA) | 0.41 | J | 37.8 | 38.5 | | ng/L | | 101 | 70 - 130 | 11 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.8 | 44.1 | | ng/L | | 117 | 70 - 130 | 5 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-65 MSD**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: PWS-MSD01-042121**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.8 | 36.2 | | ng/L | | 96 | 70 - 130 | 14 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.8 | 36.5 | | ng/L | | 97 | 70 - 130 | 9 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.8 | 36.1 | | ng/L | | 95 | 70 - 130 | 0 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.8 | 35.3 | | ng/L | | 94 | 70 - 130 | 17 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.8 | 41.7 | | ng/L | | 111 | 70 - 130 | 5 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.8 | 44.3 | | ng/L | | 117 | 70 - 130 | 3 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 33.4 | 36.2 | | ng/L | | 105 | 70 - 130 | 2 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 35.4 | 39.2 | | ng/L | | 111 | 70 - 130 | 8 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 34.4 | 33.5 | | ng/L | | 97 | 70 - 130 | 7 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 36.0 | 37.6 | | ng/L | | 105 | 70 - 130 | 2 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | | 35.0 | 38.2 | | ng/L | | 101 | 70 - 130 | 0 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 36.3 | 31.2 | | ng/L | | 86 | 70 - 130 | 7 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 36.4 | 36.1 | | ng/L | | 99 | 70 - 130 | 1 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.6 | 34.7 | | ng/L | | 95 | 70 - 130 | 1 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.8 | 40.6 | | ng/L | | 107 | 70 - 130 | 0 | 30 |
| NMeFOSA | ND | | 37.8 | 36.3 | | ng/L | | 96 | 70 - 130 | 4 | 30 |
| NEtFOSA | ND | | 37.8 | 39.5 | | ng/L | | 105 | 70 - 130 | 1 | 30 |
| NMeFOSAA | ND | | 37.8 | 39.6 | | ng/L | | 105 | 70 - 130 | 0 | 30 |
| NEtFOSAA | ND | | 37.8 | 41.7 | | ng/L | | 111 | 70 - 130 | 1 | 30 |
| NMeFOSE | ND | | 37.8 | 35.6 | | ng/L | | 94 | 70 - 130 | 10 | 30 |
| NEtFOSE | ND | | 37.8 | 38.8 | | ng/L | | 103 | 70 - 130 | 7 | 30 |
| 4:2 FTS | ND | | 35.3 | 35.9 | | ng/L | | 102 | 70 - 130 | 7 | 30 |
| 6:2 FTS | ND | | 35.8 | 35.5 | | ng/L | | 99 | 70 - 130 | 4 | 30 |
| 8:2 FTS | ND | | 36.2 | 36.9 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| 10:2 FTS | ND | | 36.4 | 31.4 | | ng/L | | 86 | 70 - 130 | 4 | 30 |
| HFPO-DA (GenX) | ND | | 37.8 | 39.4 | | ng/L | | 104 | 70 - 130 | 1 | 30 |
| F-53B Major | ND | | 35.2 | 36.5 | | ng/L | | 104 | 70 - 130 | 1 | 30 |
| F-53B Minor | ND | | 35.6 | 33.2 | | ng/L | | 93 | 70 - 130 | 8 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.6 | 42.4 | | ng/L | | 119 | 70 - 130 | 4 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* |
| *13C5 PFPeA* | *70* | | *25 - 150* |
| *13C2 PFHxA* | *83* | | *25 - 150* |
| *13C4 PFHpA* | *90* | | *25 - 150* |
| *13C4 PFOA* | *92* | | *25 - 150* |
| *13C5 PFNA* | *92* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72788-65 MSD**
**Matrix: Water**
**Analysis Batch: 486294**

**Client Sample ID: PWS-MSD01-042121**
**Prep Type: Total/NA**
**Prep Batch: 484143**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C2 PFDA | 83 | | 25 - 150 |
| 13C2 PFUnA | 81 | | 25 - 150 |
| 13C2 PFDoA | 86 | | 25 - 150 |
| 13C2 PFTeDA | 80 | | 25 - 150 |
| 13C2 PFHxDA | 87 | | 25 - 150 |
| 13C3 PFBS | 75 | | 25 - 150 |
| 18O2 PFHxS | 80 | | 25 - 150 |
| 13C4 PFOS | 76 | | 25 - 150 |
| 13C8 FOSA | 73 | | 10 - 150 |
| M2-4:2 FTS | 117 | | 25 - 150 |
| M2-6:2 FTS | 96 | | 25 - 150 |
| M2-8:2 FTS | 82 | | 25 - 150 |
| 13C2 10:2 FTS | 74 | | 25 - 150 |
| 13C3 HFPO-DA | 81 | | 25 - 150 |
| d3-NMeFOSAA | 65 | | 25 - 150 |
| d5-NEtFOSAA | 64 | | 25 - 150 |
| d-N-MeFOSA-M | 67 | | 10 - 150 |
| d-N-EtFOSA-M | 62 | | 10 - 150 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 |

**Lab Sample ID: MB 320-484284/1-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-484284/1-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 04/29/21 12:13 | 05/04/21 23:47 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFDA* | *81* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFUnA* | *96* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFTeDA* | *93* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 PFHxDA* | *88* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C3 PFBS* | *83* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C4 PFOS* | *74* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C8 FOSA* | *77* | | *10 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *M2-4:2 FTS* | *71* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *M2-6:2 FTS* | *71* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *M2-8:2 FTS* | *64* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C2 10:2 FTS* | *68* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d3-NMeFOSAA* | *58* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d5-NEtFOSAA* | *56* | | *25 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d-N-MeFOSA-M* | *60* | | *10 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d-N-EtFOSA-M* | *59* | | *10 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |
| *d9-N-EtFOSE-M* | *69* | | *10 - 150* | *04/29/21 12:13* | *05/04/21 23:47* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-484284/2-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 34.0 | | ng/L | | 85 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 31.3 | | ng/L | | 78 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 45.8 | | ng/L | | 115 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 43.0 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.9 | | ng/L | | 110 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 45.0 | | ng/L | | 120 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.0 | | ng/L | | 102 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 37.4 | | ng/L | | 98 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.2 | | ng/L | | 106 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 41.5 | | ng/L | | 108 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 44.8 | | ng/L | | 116 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 42.8 | | ng/L | | 111 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| NMeFOSA | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| NEtFOSA | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| NMeFOSAA | 40.0 | 41.4 | | ng/L | | 104 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| NMeFOSE | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| NEtFOSE | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| 4:2 FTS | 37.4 | 36.6 | | ng/L | | 98 | 60 - 135 |
| 6:2 FTS | 37.9 | 44.2 | | ng/L | | 117 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.8 | | ng/L | | 107 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.5 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| F-53B Major | 37.3 | 47.9 | | ng/L | | 128 | 60 - 135 |
| F-53B Minor | 37.7 | 46.8 | | ng/L | | 124 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 43.0 | | ng/L | | 114 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 84 | | 25 - 150 |
| 13C5 PFPeA | 82 | | 25 - 150 |
| 13C2 PFHxA | 84 | | 25 - 150 |
| 13C4 PFHpA | 88 | | 25 - 150 |
| 13C4 PFOA | 93 | | 25 - 150 |
| 13C5 PFNA | 86 | | 25 - 150 |
| 13C2 PFDA | 84 | | 25 - 150 |
| 13C2 PFUnA | 89 | | 25 - 150 |
| 13C2 PFDoA | 104 | | 25 - 150 |
| 13C2 PFTeDA | 77 | | 25 - 150 |
| 13C2 PFHxDA | 83 | | 25 - 150 |
| 13C3 PFBS | 74 | | 25 - 150 |
| 18O2 PFHxS | 78 | | 25 - 150 |
| 13C4 PFOS | 73 | | 25 - 150 |
| 13C8 FOSA | 78 | | 10 - 150 |
| M2-4:2 FTS | 68 | | 25 - 150 |
| M2-6:2 FTS | 66 | | 25 - 150 |
| M2-8:2 FTS | 75 | | 25 - 150 |
| 13C2 10:2 FTS | 71 | | 25 - 150 |
| 13C3 HFPO-DA | 87 | | 25 - 150 |
| d3-NMeFOSAA | 68 | | 25 - 150 |
| d5-NEtFOSAA | 67 | | 25 - 150 |
| d-N-MeFOSA-M | 63 | | 10 - 150 |
| d-N-EtFOSA-M | 63 | | 10 - 150 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 |

**Lab Sample ID: LCSD 320-484284/3-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 39.9 | | ng/L | | 100 | 60 - 135 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 | 4 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 | 6 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 1 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 | 7 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 | 7 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 | 5 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 2 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 | 20 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 35.3 | | ng/L | | 88 | 60 - 135 | 12 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 | 17 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 45.5 | | ng/L | | 114 | 60 - 135 | 6 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 39.4 | | ng/L | | 98 | 60 - 135 | 1 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 34.7 | | ng/L | | 98 | 60 - 135 | 12 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-484284/3-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 39.3 | | ng/L | | 105 | 60 - 135 | 13 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 37.2 | | ng/L | | 102 | 60 - 135 | 1 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 42.1 | | ng/L | | 110 | 60 - 135 | 12 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 39.8 | | ng/L | | 107 | 60 - 135 | 1 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 42.9 | | ng/L | | 112 | 60 - 135 | 3 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 43.8 | | ng/L | | 114 | 60 - 135 | 2 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 48.9 | | ng/L | | 126 | 60 - 135 | 13 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 38.7 | | ng/L | | 97 | 60 - 135 | 6 | 30 |
| NMeFOSA | | | 40.0 | 44.0 | | ng/L | | 110 | 60 - 135 | 1 | 30 |
| NEtFOSA | | | 40.0 | 44.6 | | ng/L | | 111 | 60 - 135 | 4 | 30 |
| NMeFOSAA | | | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 | 2 | 30 |
| NEtFOSAA | | | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 | 5 | 30 |
| NMeFOSE | | | 40.0 | 36.3 | | ng/L | | 91 | 60 - 135 | 10 | 30 |
| NEtFOSE | | | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 | 1 | 30 |
| 4:2 FTS | | | 37.4 | 37.7 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| 6:2 FTS | | | 37.9 | 42.9 | | ng/L | | 113 | 60 - 135 | 3 | 30 |
| 8:2 FTS | | | 38.3 | 41.0 | | ng/L | | 107 | 60 - 135 | 0 | 30 |
| 10:2 FTS | | | 38.6 | 39.4 | | ng/L | | 102 | 60 - 135 | 8 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 39.9 | | ng/L | | 100 | 60 - 135 | 4 | 30 |
| F-53B Major | | | 37.3 | 47.0 | | ng/L | | 126 | 60 - 135 | 2 | 30 |
| F-53B Minor | | | 37.7 | 46.3 | | ng/L | | 123 | 60 - 135 | 1 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 50.7 | | ng/L | | 134 | 60 - 135 | 16 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* |
| *13C5 PFPeA* | *95* | | *25 - 150* |
| *13C2 PFHxA* | *101* | | *25 - 150* |
| *13C4 PFHpA* | *109* | | *25 - 150* |
| *13C4 PFOA* | *92* | | *25 - 150* |
| *13C5 PFNA* | *94* | | *25 - 150* |
| *13C2 PFDA* | *94* | | *25 - 150* |
| *13C2 PFUnA* | *101* | | *25 - 150* |
| *13C2 PFDoA* | *115* | | *25 - 150* |
| *13C2 PFTeDA* | *101* | | *25 - 150* |
| *13C2 PFHxDA* | *102* | | *25 - 150* |
| *13C3 PFBS* | *95* | | *25 - 150* |
| *18O2 PFHxS* | *88* | | *25 - 150* |
| *13C4 PFOS* | *80* | | *25 - 150* |
| *13C8 FOSA* | *85* | | *10 - 150* |
| *M2-4:2 FTS* | *76* | | *25 - 150* |
| *M2-6:2 FTS* | *77* | | *25 - 150* |
| *M2-8:2 FTS* | *79* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-484284/3-A**
**Matrix: Water**
**Analysis Batch: 486278**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 484284**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 78 | | 25 - 150 |
| 13C3 HFPO-DA | 103 | | 25 - 150 |
| d3-NMeFOSAA | 69 | | 25 - 150 |
| d5-NEtFOSAA | 70 | | 25 - 150 |
| d-N-MeFOSA-M | 69 | | 10 - 150 |
| d-N-EtFOSA-M | 70 | | 10 - 150 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 |

## LCMS

### Prep Batch: 484131

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-1 | PWS1008-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-3 | PWS-FD01-041921 | Total/NA | Water | 3535 | |
| 320-72788-4 | PWS1009-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-6 | PWS1011-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-8 | PWS1014-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-10 | PWS1002-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-12 | PWS1004-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-14 | PWS1015-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-16 | PWS1018-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-18 | PWS1190-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-20 | PWS1188-IS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-22 | PWS1181-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-24 | PWS1172-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-26 | PWS1170-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-28 | PWS1169-OS-041921-100 | Total/NA | Water | 3535 | |
| 320-72788-30 | PWS1003-IS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-32 | PWS1017-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-34 | PWS1020-OS-042021-100 | Total/NA | Water | 3535 | |
| MB 320-484131/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-484131/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72788-12 MS | PWS-MS01-041921 | Total/NA | Water | 3535 | |
| 320-72788-12 MSD | PWS-MSD01-041921 | Total/NA | Water | 3535 | |

### Prep Batch: 484142

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-36 | PWS-FD01-042021 | Total/NA | Water | 3535 | |
| 320-72788-37 | PWS1024-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-39 | PWS1027-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-41 | PWS1021-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-43 | PWS1022-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-45 | PWS1025-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-47 | PWS1026-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-49 | PWS1028-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-51 | PWS1006-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-53 | PWS-FD02-042012 | Total/NA | Water | 3535 | |
| 320-72788-54 | PWS1168-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-56 | PWS1179-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-58 | PWS1163-OS-042021-100 | Total/NA | Water | 3535 | |
| MB 320-484142/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-484142/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72788-56 MS | PWS-MS02-042021 | Total/NA | Water | 3535 | |
| 320-72788-56 MSD | PWS-MSD02-042021 | Total/NA | Water | 3535 | |

### Prep Batch: 484143

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-60 | PWS1183-OS-042021-100 | Total/NA | Water | 3535 | |
| 320-72788-62 | PWS-FD01-042121 | Total/NA | Water | 3535 | |
| 320-72788-63 | PWS1031-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-65 | PWS1032-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-67 | PWS1038-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-69 | PWS1043-OS-042121-100 | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 484143 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-71 | PWS1035-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-73 | PWS1040-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-75 | PWS1033-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-77 | PWS1007-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-79 | PWS1184-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-81 | PWS1153-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-83 | PWS1145-OS-042121-100 | Total/NA | Water | 3535 | |
| MB 320-484143/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-484143/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72788-65 MS | PWS-MS01-042121 | Total/NA | Water | 3535 | |
| 320-72788-65 MSD | PWS-MSD01-042121 | Total/NA | Water | 3535 | |

### Prep Batch: 484284

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-85 | PWS-FD02-042121 | Total/NA | Water | 3535 | |
| 320-72788-86 | PWS1157-OS-042121-100 | Total/NA | Water | 3535 | |
| 320-72788-88 | PWS1124-OS-042121-100 | Total/NA | Water | 3535 | |
| MB 320-484284/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-484284/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-484284/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 484550

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-1 | PWS1008-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-3 | PWS-FD01-041921 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-4 | PWS1009-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-6 | PWS1011-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-8 | PWS1014-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-10 | PWS1002-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-12 | PWS1004-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-14 | PWS1015-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-16 | PWS1018-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-18 | PWS1190-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-20 | PWS1188-IS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-22 | PWS1181-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-24 | PWS1172-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-26 | PWS1170-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| MB 320-484131/1-A | Method Blank | Total/NA | Water | 537 (modified) | 484131 |
| LCS 320-484131/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-12 MS | PWS-MS01-041921 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-12 MSD | PWS-MSD01-041921 | Total/NA | Water | 537 (modified) | 484131 |

### Analysis Batch: 484646

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-28 | PWS1169-OS-041921-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-30 | PWS1003-IS-042021-100 | Total/NA | Water | 537 (modified) | 484131 |
| 320-72788-34 | PWS1020-OS-042021-100 | Total/NA | Water | 537 (modified) | 484131 |

### Analysis Batch: 484863

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-36 | PWS-FD01-042021 | Total/NA | Water | 537 (modified) | 484142 |

## LCMS (Continued)

### Analysis Batch: 484863 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-37 | PWS1024-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-39 | PWS1027-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-41 | PWS1021-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-43 | PWS1022-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-45 | PWS1025-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-47 | PWS1026-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-49 | PWS1028-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-51 | PWS1006-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-53 | PWS-FD02-042012 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-54 | PWS1168-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-56 | PWS1179-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-58 | PWS1163-OS-042021-100 | Total/NA | Water | 537 (modified) | 484142 |
| MB 320-484142/1-A | Method Blank | Total/NA | Water | 537 (modified) | 484142 |
| LCS 320-484142/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-56 MS | PWS-MS02-042021 | Total/NA | Water | 537 (modified) | 484142 |
| 320-72788-56 MSD | PWS-MSD02-042021 | Total/NA | Water | 537 (modified) | 484142 |

### Analysis Batch: 486278

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-85 | PWS-FD02-042121 | Total/NA | Water | 537 (modified) | 484284 |
| 320-72788-86 | PWS1157-OS-042121-100 | Total/NA | Water | 537 (modified) | 484284 |
| 320-72788-88 | PWS1124-OS-042121-100 | Total/NA | Water | 537 (modified) | 484284 |
| MB 320-484284/1-A | Method Blank | Total/NA | Water | 537 (modified) | 484284 |
| LCS 320-484284/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 484284 |
| LCSD 320-484284/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 484284 |

### Analysis Batch: 486294

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-60 | PWS1183-OS-042021-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-62 | PWS-FD01-042121 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-63 | PWS1031-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-65 | PWS1032-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-67 | PWS1038-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-69 | PWS1043-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-71 | PWS1035-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-73 | PWS1040-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-75 | PWS1033-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-77 | PWS1007-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-79 | PWS1184-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-81 | PWS1153-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-83 | PWS1145-OS-042121-100 | Total/NA | Water | 537 (modified) | 484143 |
| MB 320-484143/1-A | Method Blank | Total/NA | Water | 537 (modified) | 484143 |
| LCS 320-484143/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-65 MS | PWS-MS01-042121 | Total/NA | Water | 537 (modified) | 484143 |
| 320-72788-65 MSD | PWS-MSD01-042121 | Total/NA | Water | 537 (modified) | 484143 |

### Analysis Batch: 486762

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-32 | PWS1017-OS-042021-100 | Total/NA | Water | 537 (modified) | 484131 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1008-OS-041921-100
**Lab Sample ID: 320-72788-1**
**Date Collected: 04/19/21 11:16**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 291 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:05 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD01-041921
**Lab Sample ID: 320-72788-3**
**Date Collected: 04/19/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 286.1 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:15 | RS1 | TAL SAC |

## Client Sample ID: PWS1009-OS-041921-100
**Lab Sample ID: 320-72788-4**
**Date Collected: 04/19/21 13:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.3 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:24 | RS1 | TAL SAC |

## Client Sample ID: PWS1011-OS-041921-100
**Lab Sample ID: 320-72788-6**
**Date Collected: 04/19/21 14:31**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 279.7 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:34 | RS1 | TAL SAC |

## Client Sample ID: PWS1014-OS-041921-100
**Lab Sample ID: 320-72788-8**
**Date Collected: 04/19/21 16:03**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.7 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:43 | RS1 | TAL SAC |

## Client Sample ID: PWS1002-OS-041921-100
**Lab Sample ID: 320-72788-10**
**Date Collected: 04/19/21 16:43**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 299.5 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 01:53 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1004-OS-041921-100
**Lab Sample ID: 320-72788-12**
**Date Collected: 04/19/21 17:23**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 307 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 02:30 | RS1 | TAL SAC |

## Client Sample ID: PWS1015-OS-041921-100
**Lab Sample ID: 320-72788-14**
**Date Collected: 04/19/21 18:25**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.2 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 02:59 | RS1 | TAL SAC |

## Client Sample ID: PWS1018-OS-041921-100
**Lab Sample ID: 320-72788-16**
**Date Collected: 04/19/21 19:05**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 302.1 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:08 | RS1 | TAL SAC |

## Client Sample ID: PWS1190-OS-041921-100
**Lab Sample ID: 320-72788-18**
**Date Collected: 04/19/21 10:50**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 283.9 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:17 | RS1 | TAL SAC |

## Client Sample ID: PWS1188-IS-041921-100
**Lab Sample ID: 320-72788-20**
**Date Collected: 04/19/21 12:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 286 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:27 | RS1 | TAL SAC |

## Client Sample ID: PWS1181-OS-041921-100
**Lab Sample ID: 320-72788-22**
**Date Collected: 04/19/21 14:40**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:36 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1172-OS-041921-100
**Lab Sample ID: 320-72788-24**
**Date Collected: 04/19/21 16:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 279.5 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:46 | RS1 | TAL SAC |

## Client Sample ID: PWS1170-OS-041921-100
**Lab Sample ID: 320-72788-26**
**Date Collected: 04/19/21 18:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.2 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484550 | 04/30/21 03:55 | RS1 | TAL SAC |

## Client Sample ID: PWS1169-OS-041921-100
**Lab Sample ID: 320-72788-28**
**Date Collected: 04/19/21 18:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.6 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484646 | 04/30/21 12:11 | S1M | TAL SAC |

## Client Sample ID: PWS1003-IS-042021-100
**Lab Sample ID: 320-72788-30**
**Date Collected: 04/20/21 09:56**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 285.6 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484646 | 04/30/21 12:21 | S1M | TAL SAC |

## Client Sample ID: PWS1017-OS-042021-100
**Lab Sample ID: 320-72788-32**
**Date Collected: 04/20/21 10:42**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.9 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486762 | 05/06/21 22:45 | JRB | TAL SAC |

## Client Sample ID: PWS1020-OS-042021-100
**Lab Sample ID: 320-72788-34**
**Date Collected: 04/20/21 11:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 296.1 mL | 10.00 mL | 484131 | 04/28/21 19:10 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484646 | 04/30/21 12:30 | S1M | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS-FD01-042021
**Lab Sample ID: 320-72788-36**
**Date Collected: 04/20/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.9 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 07:20 | K1S | TAL SAC |

## Client Sample ID: PWS1024-OS-042021-100
**Lab Sample ID: 320-72788-37**
**Date Collected: 04/20/21 13:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.3 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 07:30 | K1S | TAL SAC |

## Client Sample ID: PWS1027-OS-042021-100
**Lab Sample ID: 320-72788-39**
**Date Collected: 04/20/21 13:32**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.6 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 07:39 | K1S | TAL SAC |

## Client Sample ID: PWS1021-OS-042021-100
**Lab Sample ID: 320-72788-41**
**Date Collected: 04/20/21 14:36**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.5 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 07:49 | K1S | TAL SAC |

## Client Sample ID: PWS1022-OS-042021-100
**Lab Sample ID: 320-72788-43**
**Date Collected: 04/20/21 15:15**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 261.2 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 07:58 | K1S | TAL SAC |

## Client Sample ID: PWS1025-OS-042021-100
**Lab Sample ID: 320-72788-45**
**Date Collected: 04/20/21 16:18**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.8 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 08:07 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1026-OS-042021-100
## Lab Sample ID: 320-72788-47
**Date Collected: 04/20/21 16:54**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 246.1 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 08:17 | K1S | TAL SAC |

## Client Sample ID: PWS1028-OS-042021-100
## Lab Sample ID: 320-72788-49
**Date Collected: 04/20/21 17:42**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.8 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 08:26 | K1S | TAL SAC |

## Client Sample ID: PWS1006-OS-042021-100
## Lab Sample ID: 320-72788-51
**Date Collected: 04/20/21 18:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.6 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 09:04 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-042012
## Lab Sample ID: 320-72788-53
**Date Collected: 04/20/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 254.4 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 09:13 | K1S | TAL SAC |

## Client Sample ID: PWS1168-OS-042021-100
## Lab Sample ID: 320-72788-54
**Date Collected: 04/20/21 09:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.9 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 09:23 | K1S | TAL SAC |

## Client Sample ID: PWS1179-OS-042021-100
## Lab Sample ID: 320-72788-56
**Date Collected: 04/20/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.6 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 09:32 | K1S | TAL SAC |

## Client Sample ID: PWS1163-OS-042021-100
**Lab Sample ID: 320-72788-58**
**Date Collected: 04/20/21 11:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 280.6 mL | 10.0 mL | 484142 | 04/29/21 04:17 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 484863 | 05/01/21 10:00 | K1S | TAL SAC |

## Client Sample ID: PWS1183-OS-042021-100
**Lab Sample ID: 320-72788-60**
**Date Collected: 04/20/21 13:55**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 276.8 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 08:29 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD01-042121
**Lab Sample ID: 320-72788-62**
**Date Collected: 04/21/21 12:01**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.2 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 08:38 | RS1 | TAL SAC |

## Client Sample ID: PWS1031-OS-042121-100
**Lab Sample ID: 320-72788-63**
**Date Collected: 04/21/21 11:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.6 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 08:47 | RS1 | TAL SAC |

## Client Sample ID: PWS1032-OS-042121-100
**Lab Sample ID: 320-72788-65**
**Date Collected: 04/21/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.7 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 08:56 | RS1 | TAL SAC |

## Client Sample ID: PWS1038-OS-042121-100
**Lab Sample ID: 320-72788-67**
**Date Collected: 04/21/21 13:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 257.5 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 09:23 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1043-OS-042121-100
**Lab Sample ID: 320-72788-69**
**Date Collected: 04/21/21 14:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.1 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 09:33 | RS1 | TAL SAC |

## Client Sample ID: PWS1035-OS-042121-100
**Lab Sample ID: 320-72788-71**
**Date Collected: 04/21/21 15:06**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.9 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:09 | RS1 | TAL SAC |

## Client Sample ID: PWS1040-OS-042121-100
**Lab Sample ID: 320-72788-73**
**Date Collected: 04/21/21 16:07**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.5 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:18 | RS1 | TAL SAC |

## Client Sample ID: PWS1033-OS-042121-100
**Lab Sample ID: 320-72788-75**
**Date Collected: 04/21/21 17:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.1 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:27 | RS1 | TAL SAC |

## Client Sample ID: PWS1007-OS-042121-100
**Lab Sample ID: 320-72788-77**
**Date Collected: 04/21/21 18:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 249.8 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:37 | RS1 | TAL SAC |

## Client Sample ID: PWS1184-OS-042121-100
**Lab Sample ID: 320-72788-79**
**Date Collected: 04/21/21 08:25**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.5 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:46 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1153-OS-042121-100
**Lab Sample ID: 320-72788-81**
**Date Collected: 04/21/21 09:10**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 249.9 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 10:55 | RS1 | TAL SAC |

## Client Sample ID: PWS1145-OS-042121-100
**Lab Sample ID: 320-72788-83**
**Date Collected: 04/21/21 10:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.9 mL | 10.0 mL | 484143 | 04/29/21 04:31 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486294 | 05/05/21 11:04 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD02-042121
**Lab Sample ID: 320-72788-85**
**Date Collected: 04/21/21 12:02**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.5 mL | 10.00 mL | 484284 | 04/29/21 12:13 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486278 | 05/05/21 00:23 | RS1 | TAL SAC |

## Client Sample ID: PWS1157-OS-042121-100
**Lab Sample ID: 320-72788-86**
**Date Collected: 04/21/21 14:00**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 281.7 mL | 10.00 mL | 484284 | 04/29/21 12:13 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486278 | 05/05/21 00:32 | RS1 | TAL SAC |

## Client Sample ID: PWS1124-OS-042121-100
**Lab Sample ID: 320-72788-88**
**Date Collected: 04/21/21 16:20**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.6 mL | 10.00 mL | 484284 | 04/29/21 12:13 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486278 | 05/05/21 00:42 | RS1 | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-72788-1 | PWS1008-OS-041921-100 | Water | 04/19/21 11:16 | 04/23/21 10:00 | |
| 320-72788-3 | PWS-FD01-041921 | Water | 04/19/21 12:01 | 04/23/21 10:00 | |
| 320-72788-4 | PWS1009-OS-041921-100 | Water | 04/19/21 13:30 | 04/23/21 10:00 | |
| 320-72788-6 | PWS1011-OS-041921-100 | Water | 04/19/21 14:31 | 04/23/21 10:00 | |
| 320-72788-8 | PWS1014-OS-041921-100 | Water | 04/19/21 16:03 | 04/23/21 10:00 | |
| 320-72788-10 | PWS1002-OS-041921-100 | Water | 04/19/21 16:43 | 04/23/21 10:00 | |
| 320-72788-12 | PWS1004-OS-041921-100 | Water | 04/19/21 17:23 | 04/23/21 10:00 | |
| 320-72788-14 | PWS1015-OS-041921-100 | Water | 04/19/21 18:25 | 04/23/21 10:00 | |
| 320-72788-16 | PWS1018-OS-041921-100 | Water | 04/19/21 19:05 | 04/23/21 10:00 | |
| 320-72788-18 | PWS1190-OS-041921-100 | Water | 04/19/21 10:50 | 04/23/21 10:00 | |
| 320-72788-20 | PWS1188-IS-041921-100 | Water | 04/19/21 12:15 | 04/23/21 10:00 | |
| 320-72788-22 | PWS1181-OS-041921-100 | Water | 04/19/21 14:40 | 04/23/21 10:00 | |
| 320-72788-24 | PWS1172-OS-041921-100 | Water | 04/19/21 16:55 | 04/23/21 10:00 | |
| 320-72788-26 | PWS1170-OS-041921-100 | Water | 04/19/21 18:10 | 04/23/21 10:00 | |
| 320-72788-28 | PWS1169-OS-041921-100 | Water | 04/19/21 18:55 | 04/23/21 10:00 | |
| 320-72788-30 | PWS1003-IS-042021-100 | Water | 04/20/21 09:56 | 04/23/21 10:00 | |
| 320-72788-32 | PWS1017-OS-042021-100 | Water | 04/20/21 10:42 | 04/23/21 10:00 | |
| 320-72788-34 | PWS1020-OS-042021-100 | Water | 04/20/21 11:35 | 04/23/21 10:00 | |
| 320-72788-36 | PWS-FD01-042021 | Water | 04/20/21 12:01 | 04/23/21 10:00 | |
| 320-72788-37 | PWS1024-OS-042021-100 | Water | 04/20/21 13:02 | 04/23/21 10:00 | |
| 320-72788-39 | PWS1027-OS-042021-100 | Water | 04/20/21 13:32 | 04/23/21 10:00 | |
| 320-72788-41 | PWS1021-OS-042021-100 | Water | 04/20/21 14:36 | 04/23/21 10:00 | |
| 320-72788-43 | PWS1022-OS-042021-100 | Water | 04/20/21 15:15 | 04/23/21 10:00 | |
| 320-72788-45 | PWS1025-OS-042021-100 | Water | 04/20/21 16:18 | 04/23/21 10:00 | |
| 320-72788-47 | PWS1026-OS-042021-100 | Water | 04/20/21 16:54 | 04/23/21 10:00 | |
| 320-72788-49 | PWS1028-OS-042021-100 | Water | 04/20/21 17:42 | 04/23/21 10:00 | |
| 320-72788-51 | PWS1006-OS-042021-100 | Water | 04/20/21 18:24 | 04/23/21 10:00 | |
| 320-72788-53 | PWS-FD02-042012 | Water | 04/20/21 12:02 | 04/23/21 10:00 | |
| 320-72788-54 | PWS1168-OS-042021-100 | Water | 04/20/21 09:10 | 04/23/21 10:00 | |
| 320-72788-56 | PWS1179-OS-042021-100 | Water | 04/20/21 10:30 | 04/23/21 10:00 | |
| 320-72788-58 | PWS1163-OS-042021-100 | Water | 04/20/21 11:35 | 04/23/21 10:00 | |
| 320-72788-60 | PWS1183-OS-042021-100 | Water | 04/20/21 13:55 | 04/23/21 10:00 | |
| 320-72788-62 | PWS-FD01-042121 | Water | 04/21/21 12:01 | 04/23/21 10:00 | |
| 320-72788-63 | PWS1031-OS-042121-100 | Water | 04/21/21 11:02 | 04/23/21 10:00 | |
| 320-72788-65 | PWS1032-OS-042121-100 | Water | 04/21/21 12:02 | 04/23/21 10:00 | |
| 320-72788-67 | PWS1038-OS-042121-100 | Water | 04/21/21 13:30 | 04/23/21 10:00 | |
| 320-72788-69 | PWS1043-OS-042121-100 | Water | 04/21/21 14:10 | 04/23/21 10:00 | |
| 320-72788-71 | PWS1035-OS-042121-100 | Water | 04/21/21 15:06 | 04/23/21 10:00 | |
| 320-72788-73 | PWS1040-OS-042121-100 | Water | 04/21/21 16:07 | 04/23/21 10:00 | |
| 320-72788-75 | PWS1033-OS-042121-100 | Water | 04/21/21 17:10 | 04/23/21 10:00 | |
| 320-72788-77 | PWS1007-OS-042121-100 | Water | 04/21/21 18:30 | 04/23/21 10:00 | |
| 320-72788-79 | PWS1184-OS-042121-100 | Water | 04/21/21 08:25 | 04/23/21 10:00 | |
| 320-72788-81 | PWS1153-OS-042121-100 | Water | 04/21/21 09:10 | 04/23/21 10:00 | |
| 320-72788-83 | PWS1145-OS-042121-100 | Water | 04/21/21 10:30 | 04/23/21 10:00 | |
| 320-72788-85 | PWS-FD02-042121 | Water | 04/21/21 12:02 | 04/23/21 10:00 | |
| 320-72788-86 | PWS1157-OS-042121-100 | Water | 04/21/21 14:00 | 04/23/21 10:00 | |
| 320-72788-88 | PWS1124-OS-042121-100 | Water | 04/21/21 16:20 | 04/23/21 10:00 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.001 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-72788 Chain of Custody

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1008-OS-041921-100 | 4/19/21 | 1116 | G | Water | N | N | X | 2 | |
| PWS1008-OS-041921-200 | 4/19/21 | 1042 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-041921 | 4/19/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1009-OS-041921-100 | 4/19/21 | 1330 | G | Water | N | N | X | 2 | |
| PWS1009-OS-041921-200 | 4/19/21 | 1307 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1011-OS-041921-100 | 4/19/21 | 1431 | G | Water | N | N | X | 2 | |
| PWS1011-OS-041921-200 | 4/19/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1014-OS-041921-100 | 4/19/21 | 1603 | G | Water | N | N | X | 2 | |
| PWS1014-OS-041921-200 | 4/19/21 | 1536 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1002-OS-041921-100 | 4/19/21 | 1643 | G | Water | N | N | X | 2 | |
| PWS1002-OS-041921-200 | 4/19/21 | 1619 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/22/21@1400 | Wood | | 4-23-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No (Yes)
Custody Seal No.: 827 1645830, 1645825, 831, 834
Cooler Temperature(s) °C and Other Remarks: 0.8, 2.9 -1.8 1.5 2.7

Ver: 01/16/2019

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5/7/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.002 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1004-OS-041921-100 | 4/19/21 | 1723 | G | Water | N | N | X | 2 | |
| PWS1004-OS-041921-200 | 4/19/21 | 1658 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-041921 | 4/19/21 | 1723 | G | Water | N | Y | X | 2 | Primary sample is PWS1004-OS-041921-100 |
| PWS-MSD01-041921 | 4/19/21 | 1723 | G | Water | N | Y | X | 2 | Primary sample is PWS1004-OS-041921-100 |
| PWS1015-OS-041921-100 | 4/19/21 | 1825 | G | Water | N | N | X | 2 | |
| PWS1015-OS-041921-200 | 4/19/21 | 1805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1018-OS-041921-100 | 4/19/21 | 1905 | G | Water | N | N | X | 2 | |
| PWS1018-OS-041921-200 | 4/19/21 | 1844 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1190-OS-041921-100 | 4/19/21 | 1050 | G | Water | N | N | X | 2 | |
| PWS1190-OS-041921-200 | 4/19/21 | 1055 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1188-IS-041921-100 | 4/19/21 | 1215 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Kaitlyn Casey | 4/22/21 @ 1800 | Wood | | 4-23-21 10:00 | ETAS AL |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No: 827 1645830, 1645825, 831 834

Cooler Temperature(s) °C and Other Remarks: 2.9 0.8 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler | Lab PM | Carrier Tracking No(s) | COC No |
|---|---|---|---|---|
| Client Contact: Evan Thomas | KMC/SEW/CAS/SMW | Alltucker, David R | FedEx | 531125.003 |
| Company: Wood E&I Solutions Inc | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 9 |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | Job #: |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1188-IS-041921-200 | 4/19/21 | 1220 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1181-OS-041921-100 | 4/19/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1181-OS-041921-200 | 4/19/21 | 1445 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1172-OS-041921-100 | 4/19/21 | 1655 | G | Water | N | N | X | 2 | |
| PWS1172-OS-041921-200 | 4/19/21 | 1700 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1170-OS-041921-100 | 4/19/21 | 1810 | G | Water | N | N | X | 2 | |
| PWS1170-OS-41921-200 | 4/19/21 | 1815 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1169-OS-041921-100 | 4/19/21 | 1855 | G | Water | N | N | X | 2 | |
| PWS1169-OS-041921-200 | 4/19/21 | 1900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1003-IS-042021-100 | 4/20/21 | 956 | G | Water | N | N | X | 2 | |
| PWS1003-IS-042021-200 | 4/20/21 | 916 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|
| | | | |

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21@1800 | Wood | | 4-23-21 1100 | ETAS AL |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☒ Yes ☐ No
Custody Seal No.: 1675830 827 825 831 834
Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 c/.Y 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.004 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1017-OS-042021-100 | 4/20/21 | 1042 | G | Water | N | N | X | 2 | |
| PWS1017-OS-042021-200 | 4/20/21 | 1020 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1020-OS-042021-100 | 4/20/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1020-OS-042021-200 | 4/20/21 | 1100 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042021 | 4/20/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1024-OS-042021-100 | 4/20/21 | 1302 | G | Water | N | N | X | 2 | |
| PWS1024-OS-042021-200 | 4/20/21 | 1224 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1027-OS-042021-100 | 4/20/21 | 1332 | G | Water | N | N | X | 2 | |
| PWS1027-OS-042021-200 | 4/20/21 | 1313 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1021-OS-042021-100 | 4/20/21 | 1436 | G | Water | N | N | X | 2 | |
| PWS1021-OS-042021-200 | 4/20/21 | 1403 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|
| Relinquished by: Lavina Cassey | Date/Time: 4/22/21 @1900 | Company: Wood | Received by: | Date/Time: 4-23-21 / 10:00 | Company: ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 827 1645830 1645834 825, 831

Cooler Temperature(s) °C and Other Remarks: 0.9 0.8, 4.8, 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.005 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | N | N | | | |
| PWS1022-OS-042021-100 | 4/20/21 | 1515 | G | Water | N | N | X | 2 | |
| PWS1022-OS-042021-200 | 4/20/21 | 1434 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1025-OS-042021-100 | 4/20/21 | 1618 | G | Water | N | N | X | 2 | |
| PWS1025-OS-042021-200 | 4/20/21 | 1546 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1026-OS-042021-100 | 4/20/21 | 1654 | G | Water | N | N | X | 2 | |
| PWS1026-OS-042021-200 | 4/20/21 | 1632 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1028-OS-042021-100 | 4/20/21 | 1742 | G | Water | N | N | X | 2 | |
| PWS1028-OS-042021-200 | 4/20/21 | 1721 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1006-OS-042021-100 | 4/20/21 | 1824 | G | Water | N | N | X | 2 | |
| PWS1006-OS-042021-200 | 4/20/21 | 1759 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042021 | 4/20/21 | 1202 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21 @ 1800 | Wood | | 4-23-21 / 12:00 | ETA SAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 827 1645830 1645825, 831, ~~834~~ 834
Cooler Temperature(s) °C and Other Remarks: 0.8, 0.9, 4.8 1.5, 2.7 °C

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.006 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR - Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1168-OS-042021-100 | 4/20/21 | 0910 | G | Water | N | N | X | 2 | |
| PWS1168-OS-042021-200 | 4/20/21 | 0915 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1179-OS-042021-100 | 4/20/21 | 1030 | G | Water | N | N | X | 2 | |
| PWS1179-OS-042021-200 | 4/20/21 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042021 | 4/20/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1179-OS-042021-100 |
| PWS-MSD02-042021 | 4/20/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1179-OS-042021-100 |
| PWS1163-OS-042021-100 | 4/20/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1163-OS-042021-200 | 4/20/21 | 1140 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1183-OS-042021-100 | 4/20/21 | 1355 | G | Water | N | N | X | 2 | |
| PWS1183-OS-042021-200 | 4/20/21 | 1400 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042121 | 4/21/21 | 1201 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Karina Casey | Date/Time: 4/22/21@1800 | Company: Wood | Received by: | Date/Time: 4-23-21 10:00 | Company: ETASAC |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: ~~4/23/21~~ 827, 1645830, 825, 831, 834
Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.007 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1031-OS-042121-100 | 4/21/21 | 1102 | G | Water | N | N | X | 2 | |
| PWS1031-OS-042121-200 | 4/21/21 | 1037 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1032-OS-042121-100 | 4/21/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1032-OS-042121-200 | 4/21/21 | 1141 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042121 | 4/21/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1032-OS-042121-100 |
| PWS-MSD01-042121 | 4/21/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1032-OS-042121-100 |
| PWS1038-OS-042121-100 | 4/21/21 | 1330 | G | Water | N | N | X | 2 | |
| PWS1038-OS-042121-200 | 4/21/21 | 1300 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1043-OS-042121-100 | 4/21/21 | 1410 | G | Water | N | N | X | 2 | |
| PWS1043-OS-042121-200 | 4/21/21 | 1346 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1035-OS-042121-100 | 4/21/21 | 1506 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21@1800 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645830, 825, 831, 834, 827

Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 37[illegible]059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.008 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 8 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1035-OS-042121-200 | 4/21/21 | 1445 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1040-OS-042121-100 | 4/21/21 | 1607 | G | Water | N | N | X | 2 | |
| PWS1040-OS-042121-200 | 4/21/21 | 1545 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1033-OS-042121-100 | 4/21/21 | 1710 | G | Water | N | N | X | 2 | |
| PWS1033-OS-042121-200 | 4/21/21 | 1627 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1007-OS-042121-100 | 4/21/21 | 1830 | G | Water | N | N | X | 2 | |
| PWS1007-OS-042121-200 | 4/21/21 | 1751 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1184-OS-042121-100 | 4/21/21 | 825 | G | Water | N | N | X | 2 | |
| PWS-1184-OS-042121-200 | 4/21/21 | 830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1153-OS-042121-100 | 4/21/21 | 910 | G | Water | N | N | X | 2 | |
| PWS1153-OS-042121-200 | 4/21/21 | 915 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21 @ 1900 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1645830, 827, 825, 831, 834

Cooler Temperature(s) °C and Other Remarks: 0.9 0.8 @ 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.009 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecanydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1145-OS-042121-100 | 4/21/21 | 1030 | G | Water | N | N | X | 2 | |
| PWS1145-OS-042121-200 | 4/21/21 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042121 | 4/21/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1157-OS-042121-100 | 4/21/21 | 1400 | G | Water | N | N | X | 2 | |
| PWS1157-OS-042121-200 | 4/21/21 | 1405 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1124-OS-042121-100 | 4/21/21 | 1620 | G | Water | N | N | X | 2 | |
| PWS1124-OS-042121-200 | 4/21/21 | 1625 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Lauren Casey | 4/22/21@1800 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-1

**Login Number: 72788**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1645830, 825, 831, 834, 827 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-72888-1
Client Project/Site: WDNR - Campbell PW Sampling
Revision: 1

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/10/2021 9:33:46 AM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| G | The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference |
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-72888-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-72888-1**

Revision 5-10-2021: This report has been revised to correct sample IDs

**Receipt**
The samples were received on 4/27/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 9 coolers at receipt time were 0.4º C, 0.4º C, 0.6º C, 0.6º C, 0.7º C, 1.0º C, 1.4º C, 1.7º C and 3.1º C.

**Receipt Exceptions**

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC):
PWS-MS02-042221 (320-72888-17[MS]), PWS-MSD02-042221 (320-72888-17[MSD]), , collection times on container labels list 12:02, while COC lists 9:20.
PWS-MS01-042401 (320-72888-73[MS]), PWS-MSD01-042401 (320-72888-73[MSD]) , collection times on containenr labels lists 12:02, while COC lists 9:25.
PWS1029-OS-042521-100 (320-72888-126), 1 of 2 container label lists collection time at 12:44, while COC lists 12:40.
All samples were logged in according to COC.

The following amples were listed twice on the COC. PWS1078-OS-042521-100, PWS1078-OS-042521-200, PWS1069-OS-042421-100 and PWS1069-OS-042421-200

**LCMS**
Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

Method 537 (modified): The matrix spike duplicate (MSD) recovery for NMeFOSE for preparation batch 320-485554 and analytical batch 320-485843 was outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): The matrix spike duplicate (MSD) recovery for 8:2 FTS in preparation batch 320-485143 and analytical batch 320-486210 was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): The matrix spike duplicate (MS/MSD) recovery for preparation batch 320-485555 and analytical batch 320-486301 was outside control limits for Perfluorononanesulfonic acid (PFNS). Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): The following sample exhibited elevated noise or matrix interferences for Perfluorohexanoic acid (PFHxA) causing elevation of the reporting limit (RL): PWS1065-OS-042421-100 (320-72888-90) . The reporting limit (RL) for the affected analyte has been raised to be equal to the matrix, and a "G" qualifier applied.

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-485144.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1049-OS-042122-100 — Lab Sample ID: 320-72888-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 39 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 7.1 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.5 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.8 | | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 21 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.8 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.0 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.0 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.27 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.4 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.86 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042221 — Lab Sample ID: 320-72888-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.7 | | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.4 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.8 | | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 21 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.96 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.7 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.33 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 10 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 12 | | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |
| NEtFOSE | 7.6 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| 8:2 FTS | 0.53 | J | 1.8 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| 10:2 FTS | 0.97 | J | 1.8 | 0.60 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1051-OS-042221-100 — Lab Sample ID: 320-72888-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 130 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 10 | | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 6.0 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.5 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 60 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 7.1 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.5 | | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.9 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.58 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 19 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.7 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS1047-OS-042221-100 — Lab Sample ID: 320-72888-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 110 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 11 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 8.0 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.0 | | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 77 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.0 | | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 7.1 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.46 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 27 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.95 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1055-OS-042221-100 — Lab Sample ID: 320-72888-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 20 | | 4.3 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.74 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.7 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.33 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 10 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.72 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.2 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 14 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1054-OS-042221-100 — Lab Sample ID: 320-72888-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 21 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.5 | J | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.55 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.9 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.29 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.5 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.60 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.2 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.6 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1048-OS-042221-100 — Lab Sample ID: 320-72888-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 57 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 7.3 | | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 4.8 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.6 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 29 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.3 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1048-OS-042221-100 (Continued) — Lab Sample ID: 320-72888-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.5 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.4 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1152-OS-042221-100 — Lab Sample ID: 320-72888-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.7 | J | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.78 | J | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.0 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042221 — Lab Sample ID: 320-72888-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.51 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.83 | J | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.5 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.1 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.0 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1151-OS-042221-100 — Lab Sample ID: 320-72888-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.3 | J | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.63 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.25 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.7 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.46 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | I | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.8 | 0.87 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1139-OS-042221-100 — Lab Sample ID: 320-72888-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.9 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.86 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.4 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.35 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.88 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.8 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS1146-OS-042221-100 — Lab Sample ID: 320-72888-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.0 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.42 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.6 | | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1138-OS-042221-100 — Lab Sample ID: 320-72888-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.5 | J | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.71 | J | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.91 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.77 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.5 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.7 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.46 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.6 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | I | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1120-OS-042221-100 — Lab Sample ID: 320-72888-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.3 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.21 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.73 | J | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.6 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.77 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | I | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1122-OS-042221-100 — Lab Sample ID: 320-72888-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.7 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.79 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.1 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.47 | J | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.0 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.27 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.17 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 11 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1119-OS-042221-100 — Lab Sample ID: 320-72888-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.54 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

## Client Sample ID: PWS1119-OS-042221-100 (Continued) — Lab Sample ID: 320-72888-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 0.81 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1173-OS-042221-100 — Lab Sample ID: 320-72888-31

No Detections.

## Client Sample ID: PWS1030-OS-042321-100 — Lab Sample ID: 320-72888-33

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 15 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.9 | | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.0 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 5.4 | | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.42 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.3 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.6 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042321 — Lab Sample ID: 320-72888-35

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 15 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.4 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.7 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 5.2 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.50 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.5 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.73 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.4 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.3 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1016-OS-042122-100 — Lab Sample ID: 320-72888-36

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 35 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.4 | | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.3 | | 1.9 | 0.56 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.9 | | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 14 | | 1.9 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.3 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.93 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 11 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.71 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.9 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 1.9 | 0.94 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1037-OS-042321-100 — Lab Sample ID: 320-72888-38

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.98 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.80 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.8 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.52 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.6 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.9 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1041-OS-042321-100 — Lab Sample ID: 320-72888-40

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 21 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.4 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.9 | 0.56 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.67 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.9 | | 1.9 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.0 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.50 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.0 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | J | 1.9 | 0.95 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1045-OS-042321-100 — Lab Sample ID: 320-72888-42

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 57 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 7.0 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 6.0 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 30 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 13 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.90 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.8 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 20 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.9 | | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1057-OS-042321-100 — Lab Sample ID: 320-72888-44

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 60 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.0 | | 1.9 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 4.9 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 24 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.32 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.4 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.2 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1057-OS-042321-100 (Continued) — Lab Sample ID: 320-72888-44

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 7.1 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.5 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.1 | | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1056-OS-042321-100 — Lab Sample ID: 320-72888-46

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 15 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.79 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.0 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.4 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.5 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.58 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.4 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.7 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1058-OS-042321-100 — Lab Sample ID: 320-72888-48

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 97 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.2 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.66 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 12 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.5 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.9 | | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.2 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.38 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.9 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.9 | | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1061-OS-042321-100 — Lab Sample ID: 320-72888-50

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 12 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.7 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.69 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.1 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.93 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1060-OS-042321-100 — Lab Sample ID: 320-72888-52

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 81 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.94 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.52 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 6.6 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.7 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1060-OS-042321-100 (Continued) — Lab Sample ID: 320-72888-52

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 4.3 | | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 9.5 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.53 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.4 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1039-OS-042321-100 — Lab Sample ID: 320-72888-54

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.0 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.90 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.7 | | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.81 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.1 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.4 | | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1176-OS-042321-100 — Lab Sample ID: 320-72888-56

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.8 | | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 4.9 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 3.3 | | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 7.6 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.1 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.0 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.7 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.7 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1142-OS-042321-100 — Lab Sample ID: 320-72888-58

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.8 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.7 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.3 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.6 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.2 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.70 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.4 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.5 | I | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS-FD02-042321 — Lab Sample ID: 320-72888-60

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.8 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.3 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.8 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.71 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.3 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.6 | I | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1137-OS-042321-100 — Lab Sample ID: 320-72888-61

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.4 | J | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.73 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.5 | J | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.44 | J | 1.9 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.5 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.59 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.2 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.2 | | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1131-OS-042321-100 — Lab Sample ID: 320-72888-63

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.9 | J | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.70 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.55 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.86 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.6 | J I | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.2 | | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1126-OS-042321-100 — Lab Sample ID: 320-72888-65

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 9.1 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.7 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.7 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 5.5 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.6 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.54 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.3 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.9 | | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1123-OS-042321-100 — Lab Sample ID: 320-72888-67

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 9.5 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.69 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.0 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.69 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.0 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.30 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.34 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.7 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1117-OS-042321-100 — Lab Sample ID: 320-72888-69

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.4 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.8 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.3 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.8 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.4 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.55 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.2 | | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1107-OS-042321-100 — Lab Sample ID: 320-72888-71

No Detections.

## Client Sample ID: PWS1062-OS-042421-100 — Lab Sample ID: 320-72888-73

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 27 | | 4.5 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.66 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.5 | | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.3 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.3 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.4 | | 1.8 | 0.87 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1064-OS-042421-100 — Lab Sample ID: 320-72888-75

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 59 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.0 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.7 | | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.5 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.6 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS-FD01-042421 — Lab Sample ID: 320-72888-77

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 59 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.3 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.6 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.1 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.8 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1067-OS-042421-100 — Lab Sample ID: 320-72888-78

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.7 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.72 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.93 | J | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.34 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.1 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1069-OS-042421-100 — Lab Sample ID: 320-72888-80

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.26 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.8 | 0.87 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1059-OS-042421-100 — Lab Sample ID: 320-72888-82

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 120 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.1 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 22 | | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.1 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.7 | | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.3 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.65 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.4 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1068-OS-042421-100 — Lab Sample ID: 320-72888-84

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.59 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.5 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.0 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.2 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.2 | J | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1068-OS-042421-100 (Continued) — Lab Sample ID: 320-72888-84

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 0.97 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1072-OS-042421-100 — Lab Sample ID: 320-72888-86

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 3.9 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 3.3 | | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.4 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.7 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.96 | J | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1074-IS-042421-100 — Lab Sample ID: 320-72888-88

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.9 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.7 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 4.1 | | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.0 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.3 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1065-OS-042421-100 — Lab Sample ID: 320-72888-90

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 52 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.2 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.70 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 6.3 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.7 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.2 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.7 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1075-OS-042421-100 — Lab Sample ID: 320-72888-92

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.71 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.56 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.85 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.3 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1079-OS-042421-100 — Lab Sample ID: 320-72888-94

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.93 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.5 | J | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.3 | J | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1108-OS-042421-100 — Lab Sample ID: 320-72888-96

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS1109-OS-042421-100 — Lab Sample ID: 320-72888-98

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.1 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.4 | | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.1 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.4 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.35 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.83 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.62 | J | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.97 | J | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1159-OS-042421-100 — Lab Sample ID: 320-72888-100

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.55 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.55 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.54 | J | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042421 — Lab Sample ID: 320-72888-102

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.80 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.56 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1133-OS-042421-100 — Lab Sample ID: 320-72888-103

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.8 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 5.2 | | 1.9 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.4 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 3.6 | | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 8.5 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.38 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.56 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.6 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.9 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1116-OS-042421-100 — Lab Sample ID: 320-72888-105

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.0 | | 4.3 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.58 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.75 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.40 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 16 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.26 | J I | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.89 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.7 | I | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

## Client Sample ID: PWS1116-OS-042421-100 (Continued) — Lab Sample ID: 320-72888-105

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1175-OS-042421-100 — Lab Sample ID: 320-72888-107

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.3 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.1 | | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.5 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.9 | | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.0 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.2 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.43 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.5 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.9 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.88 | J | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1143-OS-042421-100 — Lab Sample ID: 320-72888-109

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.50 | J | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.2 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.33 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.2 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.50 | J | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1162-OS-042421-100 — Lab Sample ID: 320-72888-111

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.58 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.0 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1156-OS-042421-100 — Lab Sample ID: 320-72888-113

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 13 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 5.5 | | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.3 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.75 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.2 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.61 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 12 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.20 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.5 | I | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Client Sample ID: PWS1053-OS-042521-100 — Lab Sample ID: 320-72888-115

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 41 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.7 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.34 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.65 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 16 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.7 | | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.6 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.50 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 24 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1077-OS-042521-100 — Lab Sample ID: 320-72888-117

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.71 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042521 — Lab Sample ID: 320-72888-119

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.61 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.79 | J | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1083-OS-042521-100 — Lab Sample ID: 320-72888-120

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 1.0 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.45 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.0 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1046-OS-042521-100 — Lab Sample ID: 320-72888-122

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 21 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 5.6 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 6.1 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 3.1 | | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 11 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.39 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.0 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.58 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 7.7 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.7 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1046-OS-042521-100 (Continued) — Lab Sample ID: 320-72888-122

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 0.88 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1081-OS-042521-100 — Lab Sample ID: 320-72888-124

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.37 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1029-OS-042521-100 — Lab Sample ID: 320-72888-126

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.4 | J | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.31 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.70 | J | 1.7 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.60 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.6 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1144-OS-042521-100 — Lab Sample ID: 320-72888-130

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.52 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.64 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.30 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.9 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.66 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1165-OS-042521-100 — Lab Sample ID: 320-72888-132

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.56 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.83 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.60 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.82 | J I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042521 — Lab Sample ID: 320-72888-134

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.68 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.29 | J I | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.72 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.75 | J I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1078-OS-042521-100
## Lab Sample ID: 320-72888-137

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.56 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.84 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1049-OS-042122-100**
**Lab Sample ID: 320-72888-1**
**Date Collected: 04/22/21 08:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **39** | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **7.1** | | 1.7 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.5** | | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.8** | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **21** | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.8** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.0** | **J** | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.0** | | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.27** | **J** | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.4** | | 1.7 | 0.45 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.86** | **J** | 1.7 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 18:53 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:53* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:53* | *1* |
| *13C2 PFHxA* | *105* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:53* | *1* |
| *13C4 PFHpA* | *108* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:53* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:53* | *1* |

## Client Sample ID: PWS1049-OS-042122-100
**Lab Sample ID: 320-72888-1**

**Date Collected: 04/22/21 08:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 104 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 PFDA | 103 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 PFUnA | 108 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 PFDoA | 96 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 PFTeDA | 99 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 PFHxDA | 105 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C3 PFBS | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 18O2 PFHxS | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| M2-4:2 FTS | 129 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| M2-6:2 FTS | 92 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| M2-8:2 FTS | 107 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C2 10:2 FTS | 94 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| 13C3 HFPO-DA | 105 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d3-NMeFOSAA | 80 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d5-NEtFOSAA | 85 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d-N-EtFOSA-M | 74 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d7-N-MeFOSE-M | 114 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |
| d9-N-EtFOSE-M | 100 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:53 | 1 |

## Client Sample ID: PWS-FD01-042221
**Lab Sample ID: 320-72888-3**

**Date Collected: 04/22/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **40** | | 4.5 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.7** | | 1.8 | 0.44 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.4** | | 1.8 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.8** | | 1.8 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **21** | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.9** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.96** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.7** | | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.33** | **J** | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS-FD01-042221**
**Date Collected: 04/22/21 12:01**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **10** | | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **12** | | 1.8 | 0.88 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **NEtFOSE** | **7.6** | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **8:2 FTS** | **0.53** | **J** | 1.8 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| **10:2 FTS** | **0.97** | **J** | 1.8 | 0.60 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 19:02 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFHxA* | *105* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFDoA* | *109* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 PFHxDA* | *101* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C3 PFBS* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C4 PFOS* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C8 FOSA* | *87* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *M2-4:2 FTS* | *118* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *M2-6:2 FTS* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C2 10:2 FTS* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *13C3 HFPO-DA* | *99* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d3-NMeFOSAA* | *66* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d5-NEtFOSAA* | *68* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d7-N-MeFOSE-M* | *101* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |
| *d9-N-EtFOSE-M* | *91* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:02* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1051-OS-042221-100**
**Date Collected: 04/22/21 11:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-4**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **130** | | 4.6 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **10** | | 1.8 | 0.45 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **6.0** | | 1.8 | 0.53 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.5** | **J** | 1.8 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **60** | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **7.1** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.5** | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.9** | | 1.8 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.58** | **J** | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **19** | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.7** | **J** | 1.8 | 0.90 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 19:44 | 05/05/21 19:11 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:11* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:11* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:11* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:11* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:11* | *1* |

## Client Sample ID: PWS1051-OS-042221-100
**Lab Sample ID: 320-72888-4**

**Date Collected: 04/22/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 PFUnA | 89 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 PFHxDA | 85 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C3 PFBS | 72 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 18O2 PFHxS | 71 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C4 PFOS | 72 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C8 FOSA | 73 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| M2-4:2 FTS | 82 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| M2-6:2 FTS | 80 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| M2-8:2 FTS | 91 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C2 10:2 FTS | 67 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d3-NMeFOSAA | 68 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d5-NEtFOSAA | 69 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d-N-MeFOSA-M | 59 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d-N-EtFOSA-M | 60 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |
| d9-N-EtFOSE-M | 93 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:11 | 1 |

## Client Sample ID: PWS1047-OS-042221-100
**Lab Sample ID: 320-72888-6**

**Date Collected: 04/22/21 12:38**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **110** | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **11** | | 1.7 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **8.0** | | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.0** | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **77** | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **11** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.0** | | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.1** | | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.46** | **J** | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |

**Client Sample ID: PWS1047-OS-042221-100**
**Date Collected: 04/22/21 12:38**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-6**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **27** | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.95** | **J** | 1.7 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 19:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *74* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C5 PFNA* | *76* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 PFHxDA* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C3 PFBS* | *69* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *18O2 PFHxS* | *75* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C4 PFOS* | *66* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C8 FOSA* | *74* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *M2-6:2 FTS* | *57* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *M2-8:2 FTS* | *66* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C2 10:2 FTS* | *68* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d3-NMeFOSAA* | *49* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d5-NEtFOSAA* | *55* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d7-N-MeFOSE-M* | *69* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |
| *d9-N-EtFOSE-M* | *69* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:21* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1055-OS-042221-100**
**Date Collected: 04/22/21 13:54**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-8**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **20** | | 4.3 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.74** | **J** | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.7** | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.33** | **J** | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **10** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.72** | **J** | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.2** | | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **14** | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.7 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 19:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *78* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:30* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:30* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:30* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:30* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:30* | *1* |

## Client Sample ID: PWS1055-OS-042221-100
**Lab Sample ID: 320-72888-8**

**Date Collected: 04/22/21 13:54**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 95 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 PFDA | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 PFUnA | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 PFTeDA | 79 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C3 PFBS | 75 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 18O2 PFHxS | 75 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C4 PFOS | 73 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C8 FOSA | 80 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| M2-4:2 FTS | 73 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| M2-6:2 FTS | 76 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| M2-8:2 FTS | 95 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C2 10:2 FTS | 70 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| 13C3 HFPO-DA | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d3-NMeFOSAA | 71 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d5-NEtFOSAA | 69 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d-N-MeFOSA-M | 66 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d-N-EtFOSA-M | 60 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |
| d9-N-EtFOSE-M | 86 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:30 | 1 |

## Client Sample ID: PWS1054-OS-042221-100
**Lab Sample ID: 320-72888-10**

**Date Collected: 04/22/21 14:43**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **21** | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.5** | **J** | 1.7 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.5** | **J** | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.55** | **J** | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.9** | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.29** | **J** | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.5** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.60** | **J** | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.2** | | 1.7 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1054-OS-042221-100**
**Date Collected: 04/22/21 14:43**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-10**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **7.6** | | 1.7 | 0.45 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.7 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 19:39 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFDoA* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 PFHxDA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C3 PFBS* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *18O2 PFHxS* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C4 PFOS* | *73* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C8 FOSA* | *77* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *M2-4:2 FTS* | *69* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *M2-6:2 FTS* | *79* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *M2-8:2 FTS* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C2 10:2 FTS* | *69* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d3-NMeFOSAA* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d5-NEtFOSAA* | *73* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d-N-MeFOSA-M* | *61* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:39* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1048-OS-042221-100**
**Lab Sample ID: 320-72888-12**
**Date Collected: 04/22/21 18:47**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **57** | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **7.3** | | 1.7 | 0.42 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **4.8** | | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.6** | **J** | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **29** | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.3** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.1** | **J** | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.5** | | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.4** | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.7 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 19:48 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:48* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:48* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:48* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:48* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:48* | *1* |

## Client Sample ID: PWS1048-OS-042221-100
**Lab Sample ID: 320-72888-12**
**Date Collected: 04/22/21 18:47**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 91 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 PFDA | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 PFDoA | 89 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 PFHxDA | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 18O2 PFHxS | 77 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C4 PFOS | 76 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C8 FOSA | 75 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| M2-4:2 FTS | 138 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| M2-6:2 FTS | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| M2-8:2 FTS | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C2 10:2 FTS | 75 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d3-NMeFOSAA | 68 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d5-NEtFOSAA | 61 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d7-N-MeFOSE-M | 87 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 19:48 | 1 |

## Client Sample ID: PWS1152-OS-042221-100
**Lab Sample ID: 320-72888-14**
**Date Collected: 04/22/21 08:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.7** | **J** | 4.5 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.78** | **J** | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.8 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1152-OS-042221-100**
**Lab Sample ID: 320-72888-14**
**Date Collected: 04/22/21 08:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.0** | **I** | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 19:57 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *74* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFDA* | *78* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFUnA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFTeDA* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 PFHxDA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C3 PFBS* | *77* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *18O2 PFHxS* | *73* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C4 PFOS* | *71* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C8 FOSA* | *76* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *M2-6:2 FTS* | *70* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *M2-8:2 FTS* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C2 10:2 FTS* | *65* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d3-NMeFOSAA* | *51* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d5-NEtFOSAA* | *50* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d-N-MeFOSA-M* | *62* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d7-N-MeFOSE-M* | *67* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |
| *d9-N-EtFOSE-M* | *68* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 19:57* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD02-042221**
**Lab Sample ID: 320-72888-16**
**Date Collected: 04/22/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.4 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.51** | **J** | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.83** | **J** | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.5** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.1** | **J** | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.0** | | 1.8 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/04/21 19:44 | 05/05/21 20:34 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:34* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:34* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:34* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:34* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:34* | *1* |

## Client Sample ID: PWS-FD02-042221
**Lab Sample ID: 320-72888-16**

**Date Collected: 04/22/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 98 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 PFDA | 101 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 PFDoA | 86 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 PFTeDA | 91 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C4 PFOS | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| M2-4:2 FTS | 109 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| M2-6:2 FTS | 81 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| M2-8:2 FTS | 109 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C2 10:2 FTS | 76 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d3-NMeFOSAA | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d5-NEtFOSAA | 73 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |
| d9-N-EtFOSE-M | 91 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 20:34 | 1 |

## Client Sample ID: PWS1151-OS-042221-100
**Lab Sample ID: 320-72888-17**

**Date Collected: 04/22/21 09:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.3** | **J** | 4.4 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.63** | **J** | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.25** | **J** | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.4** | **J** | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.7** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.46** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1151-OS-042221-100**
**Lab Sample ID: 320-72888-17**
**Date Collected: 04/22/21 09:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.4** | **I** | 1.8 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.8 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/04/21 19:44 | 05/05/21 20:43 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFHxA* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFUnA* | *103* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFTeDA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C3 PFBS* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *18O2 PFHxS* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C4 PFOS* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C8 FOSA* | *85* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *M2-4:2 FTS* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *M2-6:2 FTS* | *78* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *M2-8:2 FTS* | *64* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C2 10:2 FTS* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d3-NMeFOSAA* | *65* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d5-NEtFOSAA* | *64* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 20:43* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1139-OS-042221-100**
**Lab Sample ID: 320-72888-19**
**Date Collected: 04/22/21 10:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.9** | | 4.5 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.8 | 0.44 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.8 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.86** | **J** | 1.8 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.4** | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.8** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.35** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.88** | **J** | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.8** | **I** | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.88 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 21:10 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:10* | *1* |
| *13C5 PFPeA* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:10* | *1* |
| *13C2 PFHxA* | *111* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:10* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:10* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:10* | *1* |

## Client Sample ID: PWS1139-OS-042221-100
**Lab Sample ID: 320-72888-19**

**Date Collected: 04/22/21 10:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 109 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 PFDA | 104 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 PFUnA | 104 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 PFDoA | 108 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 PFTeDA | 110 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 PFHxDA | 109 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 18O2 PFHxS | 98 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C4 PFOS | 89 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| M2-4:2 FTS | 137 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| M2-6:2 FTS | 93 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C2 10:2 FTS | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| 13C3 HFPO-DA | 105 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d3-NMeFOSAA | 67 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d5-NEtFOSAA | 68 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d-N-MeFOSA-M | 83 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d-N-EtFOSA-M | 82 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d7-N-MeFOSE-M | 81 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:10 | 1 |

## Client Sample ID: PWS1146-OS-042221-100
**Lab Sample ID: 320-72888-21**

**Date Collected: 04/22/21 11:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.0** | | 4.5 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.42** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1146-OS-042221-100**
**Lab Sample ID: 320-72888-21**
**Date Collected: 04/22/21 11:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.6** | | 1.8 | 0.88 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 21:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFDoA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *18O2 PFHxS* | *75* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C4 PFOS* | *73* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C8 FOSA* | *81* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *M2-4:2 FTS* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *M2-6:2 FTS* | *75* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *M2-8:2 FTS* | *77* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C2 10:2 FTS* | *70* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d3-NMeFOSAA* | *69* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d5-NEtFOSAA* | *68* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d-N-EtFOSA-M* | *59* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:19* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1138-OS-042221-100**
**Date Collected: 04/22/21 12:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-23**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.5** | **J** | 4.4 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.71** | **J** | 1.8 | 0.43 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.91** | **J** | 1.8 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.77** | **J** | 1.8 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.5** | | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.7** | | 1.8 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.46** | **J** | 1.8 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.6** | | 1.8 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.9** | **I** | 1.8 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.8 | 0.86 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/04/21 19:44 | 05/05/21 21:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |

## Client Sample ID: PWS1138-OS-042221-100
**Lab Sample ID: 320-72888-23**
**Date Collected: 04/22/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *102* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFTeDA* | *91* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C4 PFOS* | *79* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C8 FOSA* | *85* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *M2-4:2 FTS* | *145* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *M2-8:2 FTS* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C2 10:2 FTS* | *75* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d3-NMeFOSAA* | *69* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d5-NEtFOSAA* | *74* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |
| *d9-N-EtFOSE-M* | *92* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:29* | *1* |

## Client Sample ID: PWS1120-OS-042221-100
**Lab Sample ID: 320-72888-25**
**Date Collected: 04/22/21 13:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.3** | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.21** | **J** | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.73** | **J** | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.6** | **J** | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.77** | **J** | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |

**Client Sample ID: PWS1120-OS-042221-100**
**Lab Sample ID: 320-72888-25**
**Date Collected: 04/22/21 13:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | **I** | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.7 | 0.83 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 21:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C5 PFNA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFUnA* | *95* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFTeDA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C3 PFBS* | *77* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *M2-4:2 FTS* | *88* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *M2-6:2 FTS* | *71* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *M2-8:2 FTS* | *71* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C2 10:2 FTS* | *70* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d3-NMeFOSAA* | *54* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d5-NEtFOSAA* | *64* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d-N-EtFOSA-M* | *69* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d7-N-MeFOSE-M* | *79* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |
| *d9-N-EtFOSE-M* | *75* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:38* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1122-OS-042221-100**
**Date Collected: 04/22/21 14:40**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-27**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.7** | | 4.3 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.79** | **J** | 1.7 | 0.42 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.1** | | 1.7 | 0.50 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.47** | **J** | 1.7 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.0** | | 1.7 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.1** | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.27** | **J** | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.7 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.17** | **J** | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **11** | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.84 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/04/21 19:44 | 05/05/21 21:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:47* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:47* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:47* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:47* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:47* | *1* |

## Client Sample ID: PWS1122-OS-042221-100
**Lab Sample ID: 320-72888-27**
**Date Collected: 04/22/21 14:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 106 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 PFDA | 97 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 PFHxDA | 95 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C3 PFBS | 83 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 18O2 PFHxS | 78 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C4 PFOS | 83 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C8 FOSA | 89 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| M2-4:2 FTS | 133 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| M2-6:2 FTS | 97 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| M2-8:2 FTS | 99 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C2 10:2 FTS | 92 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d5-NEtFOSAA | 69 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d-N-MeFOSA-M | 74 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 21:47 | 1 |

## Client Sample ID: PWS1119-OS-042221-100
**Lab Sample ID: 320-72888-29**
**Date Collected: 04/22/21 15:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.8** | **J** | 4.7 | 2.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.54** | **J** | 1.9 | 0.19 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.81** | **J** | 1.9 | 0.54 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1119-OS-042221-100**
**Lab Sample ID: 320-72888-29**
**Date Collected: 04/22/21 15:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.9 | 0.92 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 21:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFTeDA* | *99* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C3 PFBS* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C4 PFOS* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C8 FOSA* | *86* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *M2-6:2 FTS* | *74* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *M2-8:2 FTS* | *72* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *13C3 HFPO-DA* | *97* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d5-NEtFOSAA* | *70* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d-N-EtFOSA-M* | *69* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |
| *d9-N-EtFOSE-M* | *83* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 21:56* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1173-OS-042221-100**
**Date Collected: 04/22/21 16:30**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-31**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.2 | 2.0 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.7 | 0.17 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.47 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.45 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.81 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/04/21 19:44 | 05/05/21 22:33 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 22:33* | *1* |

## Client Sample ID: PWS1173-OS-042221-100
**Lab Sample ID: 320-72888-31**

**Date Collected: 04/22/21 16:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 89 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C2 PFTeDA | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C2 PFHxDA | 90 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C4 PFOS | 79 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C8 FOSA | 80 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| M2-4:2 FTS | 135 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| M2-6:2 FTS | 114 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C2 10:2 FTS | 79 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d3-NMeFOSAA | 57 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d5-NEtFOSAA | 68 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |
| d9-N-EtFOSE-M | 94 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 22:33 | 1 |

## Client Sample ID: PWS1030-OS-042321-100
**Lab Sample ID: 320-72888-33**

**Date Collected: 04/23/21 08:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **15** | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.9** | | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.0** | | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **5.4** | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.8** | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.42** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.3** | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.6** | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1030-OS-042321-100**
**Date Collected: 04/23/21 08:40**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-33**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 19:41 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 PFHxDA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C3 PFBS* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C8 FOSA* | *97* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *M2-4:2 FTS* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *M2-6:2 FTS* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *M2-8:2 FTS* | *106* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C2 10:2 FTS* | *116* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d5-NEtFOSAA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |
| *d9-N-EtFOSE-M* | *85* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:41* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS-FD01-042321**
**Date Collected: 04/23/21 12:01**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-35**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **15** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.4** | | 1.9 | 0.46 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.7** | **J** | 1.9 | 0.54 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **5.2** | | 1.9 | 0.79 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.50** | **J** | 1.9 | 0.25 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.5** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.73** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.4** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **8.3** | | 1.9 | 0.50 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.9 | 0.91 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:20 | 05/05/21 22:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 22:46* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 22:46* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 22:46* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 22:46* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 22:46* | *1* |

## Client Sample ID: PWS-FD01-042321
**Lab Sample ID: 320-72888-35**

**Date Collected: 04/23/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 PFDA | 96 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 PFUnA | 105 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 PFDoA | 106 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 PFTeDA | 102 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 PFHxDA | 111 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C8 FOSA | 104 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| M2-4:2 FTS | 86 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| M2-6:2 FTS | 117 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| M2-8:2 FTS | 116 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C2 10:2 FTS | 121 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| 13C3 HFPO-DA | 79 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d3-NMeFOSAA | 92 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d5-NEtFOSAA | 99 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d-N-MeFOSA-M | 84 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d-N-EtFOSA-M | 80 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 22:46 | 1 |

## Client Sample ID: PWS1016-OS-042122-100
**Lab Sample ID: 320-72888-36**

**Date Collected: 04/23/21 09:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **35** | | 4.8 | 2.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.4** | | 1.9 | 0.47 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.3** | | 1.9 | 0.56 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.9** | | 1.9 | 0.24 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **14** | | 1.9 | 0.82 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.3** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.93** | **J** | 1.9 | 0.29 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **11** | | 1.9 | 0.55 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.71** | **J** | 1.9 | 0.18 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1016-OS-042122-100**
**Date Collected: 04/23/21 09:40**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-36**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.9** | | 1.9 | 0.52 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.5** | | 1.9 | 0.94 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NMeFOSE | ND | | 3.9 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| 8:2 FTS | ND | F1 | 1.9 | 0.44 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.4 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 05/03/21 04:20 | 05/05/21 23:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFUnA* | *101* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFDoA* | *103* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 PFHxDA* | *104* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C4 PFOS* | *93* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *M2-4:2 FTS* | *98* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *M2-6:2 FTS* | *110* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *M2-8:2 FTS* | *109* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C2 10:2 FTS* | *112* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d5-NEtFOSAA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d-N-MeFOSA-M* | *85* | | *10 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d-N-EtFOSA-M* | *77* | | *10 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d7-N-MeFOSE-M* | *90* | | *10 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/03/21 04:20* | *05/05/21 23:24* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1037-OS-042321-100**
**Date Collected: 04/23/21 10:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-38**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 4.5 | 2.2 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.98** | **J** | 1.8 | 0.44 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.80** | **J** | 1.8 | 0.53 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.8** | | 1.8 | 0.77 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.9** | | 1.8 | 0.18 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.52** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.8 | 0.52 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.6** | | 1.8 | 0.49 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.9** | | 1.8 | 0.89 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 04:20 | 05/05/21 23:52 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:52* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:52* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:52* | *1* |
| *13C4 PFHpA* | *83* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:52* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 23:52* | *1* |

## Client Sample ID: PWS1037-OS-042321-100
**Lab Sample ID: 320-72888-38**

**Date Collected: 04/23/21 10:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 93 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 PFDA | 92 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 PFDoA | 99 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 PFTeDA | 104 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 PFHxDA | 104 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| M2-4:2 FTS | 95 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| M2-6:2 FTS | 97 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C2 10:2 FTS | 135 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| 13C3 HFPO-DA | 87 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d3-NMeFOSAA | 94 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d5-NEtFOSAA | 86 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d-N-EtFOSA-M | 72 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d7-N-MeFOSE-M | 84 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 23:52 | 1 |

## Client Sample ID: PWS1041-OS-042321-100
**Lab Sample ID: 320-72888-40**

**Date Collected: 04/23/21 11:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **21** | | 4.8 | 2.3 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.4** | **J** | 1.9 | 0.47 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.9 | 0.56 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.67** | **J** | 1.9 | 0.24 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.9** | | 1.9 | 0.82 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.71 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.0** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.50** | **J** | 1.9 | 0.29 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | **J** | 1.9 | 0.55 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |

**Client Sample ID: PWS1041-OS-042321-100**
**Lab Sample ID: 320-72888-40**
**Date Collected: 04/23/21 11:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **6.0** | | 1.9 | 0.52 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.94 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | **J** | 1.9 | 0.95 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NMeFOSA | ND | | 1.9 | 0.42 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.3 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.45 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.5 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 05/03/21 04:20 | 05/06/21 00:01 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFDoA* | *100* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *M2-4:2 FTS* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *M2-8:2 FTS* | *98* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C2 10:2 FTS* | *109* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d5-NEtFOSAA* | *95* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d7-N-MeFOSE-M* | *98* | | *10 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/03/21 04:20* | *05/06/21 00:01* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1045-OS-042321-100**
**Date Collected: 04/23/21 12:45**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-42**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **57** | | 4.7 | 2.2 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **7.0** | | 1.9 | 0.46 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **6.0** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.2** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **30** | | 1.9 | 0.79 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **13** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.90** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.8** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **20** | | 1.9 | 0.50 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.9** | | 1.9 | 0.91 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:20 | 05/06/21 00:11 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:11* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:11* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:11* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:11* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 04:20* | *05/06/21 00:11* | *1* |

## Client Sample ID: PWS1045-OS-042321-100
**Lab Sample ID: 320-72888-42**

**Date Collected: 04/23/21 12:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 97 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 PFUnA | 97 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 PFDoA | 92 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 PFHxDA | 96 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C4 PFOS | 87 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| M2-4:2 FTS | 87 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| M2-6:2 FTS | 88 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| M2-8:2 FTS | 99 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C2 10:2 FTS | 102 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d5-NEtFOSAA | 89 | | 25 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d-N-EtFOSA-M | 75 | | 10 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d7-N-MeFOSE-M | 79 | | 10 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 05/03/21 04:20 | 05/06/21 00:11 | 1 |

## Client Sample ID: PWS1057-OS-042321-100
**Lab Sample ID: 320-72888-44**

**Date Collected: 04/23/21 13:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **60** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.0** | | 1.9 | 0.45 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **4.9** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **24** | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.32** | **J** | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.4** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.2** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.1** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1057-OS-042321-100**
**Date Collected: 04/23/21 13:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-44**
**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **7.5** | | 1.9 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.1** | | 1.9 | 0.91 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 09:28 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFUnA* | *98* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 PFHxDA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C3 PFBS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C4 PFOS* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C8 FOSA* | *96* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *M2-8:2 FTS* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C2 10:2 FTS* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d5-NEtFOSAA* | *99* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:28* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1056-OS-042321-100**
**Date Collected: 04/23/21 14:45**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-46**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **15** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.79** | **J** | 1.8 | 0.45 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.0** | **J** | 1.8 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.4** | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.5** | | 1.8 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.58** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.4** | | 1.8 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **8.7** | | 1.8 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.8 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 09:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |

## Client Sample ID: PWS1056-OS-042321-100
**Lab Sample ID: 320-72888-46**

**Date Collected: 04/23/21 14:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 PFHxDA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C4 PFOS* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C8 FOSA* | *105* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *M2-4:2 FTS* | *82* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C2 10:2 FTS* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *13C3 HFPO-DA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d5-NEtFOSAA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:37* | *1* |

## Client Sample ID: PWS1058-OS-042321-100
**Lab Sample ID: 320-72888-48**

**Date Collected: 04/23/21 15:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **97** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.2** | **J** | 1.8 | 0.45 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.66** | **J** | 1.8 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **12** | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.5** | | 1.8 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.9** | | 1.8 | 0.27 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.2** | | 1.8 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.38** | **J** | 1.8 | 0.17 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1058-OS-042321-100**
**Date Collected: 04/23/21 15:40**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-48**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **5.9** | **I** | 1.8 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.9** | | 1.8 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 09:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFHxA* | *104* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 PFHxDA* | *78* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *18O2 PFHxS* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *M2-4:2 FTS* | *77* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *M2-6:2 FTS* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *M2-8:2 FTS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C2 10:2 FTS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d5-NEtFOSAA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |
| *d9-N-EtFOSE-M* | *83* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:47* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1061-OS-042321-100**
**Date Collected: 04/23/21 16:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-50**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **12** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.7** | **J** | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.69** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.1** | | 1.9 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.93** | **J** | 1.9 | 0.91 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 09:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:56* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:56* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:56* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:56* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:56* | *1* |

## Client Sample ID: PWS1061-OS-042321-100

**Lab Sample ID: 320-72888-50**

**Date Collected: 04/23/21 16:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 PFUnA | 94 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 PFDoA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 PFTeDA | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 PFHxDA | 80 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C3 PFBS | 86 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 18O2 PFHxS | 81 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C4 PFOS | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| M2-4:2 FTS | 75 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| M2-8:2 FTS | 92 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C2 10:2 FTS | 94 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d3-NMeFOSAA | 93 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d5-NEtFOSAA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d7-N-MeFOSE-M | 79 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 09:56 | 1 |

## Client Sample ID: PWS1060-OS-042321-100

**Lab Sample ID: 320-72888-52**

**Date Collected: 04/23/21 17:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **81** | | 4.7 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.94** | **J** | 1.9 | 0.55 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.52** | **J** | 1.9 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **6.6** | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.7** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **4.3** | | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **9.5** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.53** | **J** | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1060-OS-042321-100**
**Date Collected: 04/23/21 17:10**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-52**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **8.4** | **I** | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.5** | | 1.9 | 0.93 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/03/21 04:32 | 05/05/21 10:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFHxA* | *104* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFUnA* | *103* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C4 PFOS* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C8 FOSA* | *109* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *M2-4:2 FTS* | *74* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *M2-6:2 FTS* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *M2-8:2 FTS* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C2 10:2 FTS* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *13C3 HFPO-DA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d5-NEtFOSAA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d7-N-MeFOSE-M* | *94* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:05* | *1* |

## Client Sample ID: PWS1039-OS-042321-100
**Lab Sample ID: 320-72888-54**

**Date Collected: 04/23/21 19:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.5 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.0** | **J** | 1.8 | 0.44 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.90** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.7** | | 1.8 | 0.76 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.8** | | 1.8 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.81** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.1** | | 1.8 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.2** | | 1.8 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.4** | | 1.8 | 0.88 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 04:32 | 05/05/21 10:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:15* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:15* | *1* |
| *13C2 PFHxA* | *114* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:15* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:15* | *1* |
| *13C4 PFOA* | *108* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:15* | *1* |

## Client Sample ID: PWS1039-OS-042321-100
**Lab Sample ID: 320-72888-54**

**Date Collected: 04/23/21 19:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 100 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 PFUnA | 104 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 PFDoA | 103 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 PFTeDA | 96 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C3 PFBS | 93 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 18O2 PFHxS | 102 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C4 PFOS | 100 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C8 FOSA | 104 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| M2-4:2 FTS | 83 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| M2-6:2 FTS | 96 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C2 10:2 FTS | 99 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| 13C3 HFPO-DA | 95 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d3-NMeFOSAA | 96 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d5-NEtFOSAA | 103 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d-N-MeFOSA-M | 88 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d-N-EtFOSA-M | 81 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d7-N-MeFOSE-M | 88 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |
| d9-N-EtFOSE-M | 96 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 10:15 | 1 |

## Client Sample ID: PWS1176-OS-042321-100
**Lab Sample ID: 320-72888-56**

**Date Collected: 04/23/21 08:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.8 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.8** | | 1.9 | 0.47 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **4.9** | | 1.9 | 0.55 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **3.3** | | 1.9 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **7.6** | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.1** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.0** | **J** | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.7** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1176-OS-042321-100**
**Lab Sample ID: 320-72888-56**
**Date Collected: 04/23/21 08:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **5.7** | **I** | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/03/21 04:32 | 05/05/21 10:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C5 PFPeA* | *71* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 PFHxDA* | *80* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *M2-4:2 FTS* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *M2-8:2 FTS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C2 10:2 FTS* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *13C3 HFPO-DA* | *81* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d5-NEtFOSAA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d7-N-MeFOSE-M* | *83* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 10:24* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1142-OS-042321-100**
**Date Collected: 04/23/21 09:40**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-58**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.8** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.7** | **J** | 1.8 | 0.45 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.3** | | 1.8 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.6** | **J** | 1.8 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.2** | | 1.8 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.70** | **J** | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.4** | | 1.8 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **5.5** | **I** | 1.8 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | | 1.8 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 11:02 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:02* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:02* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:02* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:02* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:02* | *1* |

## Client Sample ID: PWS1142-OS-042321-100
**Lab Sample ID: 320-72888-58**

**Date Collected: 04/23/21 09:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 93 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 PFDA | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 PFUnA | 96 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 PFHxDA | 79 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 18O2 PFHxS | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C4 PFOS | 91 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C8 FOSA | 98 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| M2-4:2 FTS | 85 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| M2-6:2 FTS | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| M2-8:2 FTS | 86 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C2 10:2 FTS | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| 13C3 HFPO-DA | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d3-NMeFOSAA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d5-NEtFOSAA | 93 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d7-N-MeFOSE-M | 84 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:02 | 1 |

## Client Sample ID: PWS-FD02-042321
**Lab Sample ID: 320-72888-60**

**Date Collected: 04/23/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.8** | | 4.6 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | **J** | 1.9 | 0.46 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.3** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.8** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.9** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.71** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.3** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |

**Client Sample ID: PWS-FD02-042321**
**Lab Sample ID: 320-72888-60**
**Date Collected: 04/23/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **5.6** | **I** | 1.9 | 0.50 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | **J** | 1.9 | 0.91 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 11:11 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C4 PFHpA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C5 PFNA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFDA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFUnA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 PFHxDA* | *74* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C3 PFBS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C8 FOSA* | *99* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *M2-4:2 FTS* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *M2-6:2 FTS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *M2-8:2 FTS* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C2 10:2 FTS* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d5-NEtFOSAA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |
| *d9-N-EtFOSE-M* | *83* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:11* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1137-OS-042321-100**
**Date Collected: 04/23/21 10:20**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-61**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.4** | **J** | 4.8 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.9 | 0.47 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.9 | 0.55 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.73** | **J** | 1.9 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.5** | **J** | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.44** | **J** | 1.9 | 0.26 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.5** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.59** | **J** | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.2** | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.2** | | 1.9 | 0.93 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/03/21 04:32 | 05/05/21 11:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:21* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:21* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:21* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:21* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:21* | *1* |

## Client Sample ID: PWS1137-OS-042321-100
**Lab Sample ID: 320-72888-61**
**Date Collected: 04/23/21 10:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 PFDA | 85 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 PFDoA | 84 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 PFTeDA | 80 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 PFHxDA | 74 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C3 PFBS | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C4 PFOS | 84 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| M2-4:2 FTS | 84 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| M2-6:2 FTS | 101 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| M2-8:2 FTS | 87 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C2 10:2 FTS | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d3-NMeFOSAA | 88 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d5-NEtFOSAA | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d-N-EtFOSA-M | 67 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:21 | 1 |

## Client Sample ID: PWS1131-OS-042321-100
**Lab Sample ID: 320-72888-63**
**Date Collected: 04/23/21 11:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.9** | **J** | 4.5 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.70** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.8 | 0.76 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.55** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.86** | **J** | 1.8 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1131-OS-042321-100**
**Date Collected: 04/23/21 11:15**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-63**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.6** | **J I** | 1.8 | 0.48 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.2** | | 1.8 | 0.88 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 04:32 | 05/05/21 11:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C5 PFNA* | *85* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFDA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 PFHxDA* | *79* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C4 PFOS* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *M2-4:2 FTS* | *78* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *M2-6:2 FTS* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *M2-8:2 FTS* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C2 10:2 FTS* | *85* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d3-NMeFOSAA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d5-NEtFOSAA* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:30* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1126-OS-042321-100**
**Lab Sample ID: 320-72888-65**
**Date Collected: 04/23/21 12:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **9.1** | | 4.7 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.9** | | 1.9 | 0.46 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.7** | | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.7** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **5.5** | | 1.9 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.6** | | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.54** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.3** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.9** | | 1.9 | 0.92 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/03/21 04:32 | 05/05/21 11:39 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:39* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:39* | *1* |
| *13C2 PFHxA* | *103* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:39* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:39* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:39* | *1* |

## Client Sample ID: PWS1126-OS-042321-100
**Lab Sample ID: 320-72888-65**

**Date Collected: 04/23/21 12:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 PFDA | 95 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 PFDoA | 94 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 PFTeDA | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| M2-4:2 FTS | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| M2-6:2 FTS | 107 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C2 10:2 FTS | 100 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d3-NMeFOSAA | 90 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d5-NEtFOSAA | 92 | | 25 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d-N-MeFOSA-M | 78 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d-N-EtFOSA-M | 74 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d7-N-MeFOSE-M | 84 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |
| d9-N-EtFOSE-M | 91 | | 10 - 150 | 05/03/21 04:32 | 05/05/21 11:39 | 1 |

## Client Sample ID: PWS1123-OS-042321-100
**Lab Sample ID: 320-72888-67**

**Date Collected: 04/23/21 13:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **9.5** | | 4.7 | 2.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.69** | **J** | 1.9 | 0.46 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.0** | **J** | 1.9 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.69** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.0** | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.30** | **J** | 1.9 | 0.29 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.3** | **J** | 1.9 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.34** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.9** | | 1.9 | 0.53 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1123-OS-042321-100**
**Date Collected: 04/23/21 13:10**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-67**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.7** | **I** | 1.9 | 0.51 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | **J** | 1.9 | 0.92 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 11:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C3 PFBS* | *87* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C4 PFOS* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *M2-4:2 FTS* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *M2-6:2 FTS* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *M2-8:2 FTS* | *103* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C2 10:2 FTS* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d3-NMeFOSAA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d5-NEtFOSAA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d-N-EtFOSA-M* | *76* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 11:49* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1117-OS-042321-100**
**Date Collected: 04/23/21 14:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-69**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.4** | | 4.4 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.8 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.8** | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.3** | **J** | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.8** | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.4** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.55** | **J** | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.2** | | 1.8 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.8 | 0.86 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 19:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:50* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:50* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:50* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:50* | *1* |
| *13C4 PFOA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:50* | *1* |

## Client Sample ID: PWS1117-OS-042321-100
**Lab Sample ID: 320-72888-69**
**Date Collected: 04/23/21 14:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 97 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 PFDA | 92 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 PFDoA | 86 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 PFTeDA | 81 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 PFHxDA | 90 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C4 PFOS | 85 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| M2-4:2 FTS | 99 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| M2-8:2 FTS | 88 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C2 10:2 FTS | 103 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| 13C3 HFPO-DA | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d3-NMeFOSAA | 80 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d5-NEtFOSAA | 79 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d-N-EtFOSA-M | 71 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |
| d9-N-EtFOSE-M | 66 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 19:50 | 1 |

## Client Sample ID: PWS1107-OS-042321-100
**Lab Sample ID: 320-72888-71**
**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.4 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1107-OS-042321-100**
**Lab Sample ID: 320-72888-71**
**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 20:00 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C5 PFNA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFUnA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C3 PFBS* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C8 FOSA* | *96* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *M2-6:2 FTS* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C2 10:2 FTS* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *13C3 HFPO-DA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d3-NMeFOSAA* | *76* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |
| *d9-N-EtFOSE-M* | *70* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:00* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1062-OS-042421-100**
**Lab Sample ID: 320-72888-73**
**Date Collected: 04/24/21 08:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **27** | | 4.5 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.66** | **J** | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.1** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.5** | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.9** | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.3** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.3** | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.4** | | 1.8 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.4** | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NMeFOSE | ND | | 3.6 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 20:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |

## Client Sample ID: PWS1062-OS-042421-100
**Lab Sample ID: 320-72888-73**

**Date Collected: 04/24/21 08:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFTeDA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 PFHxDA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C4 PFOS* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C8 FOSA* | *89* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *M2-4:2 FTS* | *79* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *M2-6:2 FTS* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C2 10:2 FTS* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d5-NEtFOSAA* | *77* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d-N-EtFOSA-M* | *63* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d7-N-MeFOSE-M* | *79* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:09* | *1* |

## Client Sample ID: PWS1064-OS-042421-100
**Lab Sample ID: 320-72888-75**

**Date Collected: 04/24/21 09:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **59** | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.0** | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.9** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.7** | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.5** | | 1.7 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1064-OS-042421-100**
**Lab Sample ID: 320-72888-75**
**Date Collected: 04/24/21 09:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.6** | | 1.7 | 0.46 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:37 | 05/04/21 20:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *105* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFUnA* | *107* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFDoA* | *109* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *M2-4:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *M2-6:2 FTS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *M2-8:2 FTS* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C2 10:2 FTS* | *125* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d3-NMeFOSAA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d5-NEtFOSAA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d7-N-MeFOSE-M* | *104* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 20:37* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS-FD01-042421**
**Date Collected: 04/24/21 12:01**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-77**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **59** | | 4.2 | 2.0 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.3** | | 1.7 | 0.71 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.1** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.6** | **J** | 1.7 | 0.25 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.1** | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.8** | | 1.7 | 0.45 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.82 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:37 | 05/04/21 20:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:47* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:47* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:47* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:47* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 20:47* | *1* |

## Client Sample ID: PWS-FD01-042421
**Lab Sample ID: 320-72888-77**
**Date Collected: 04/24/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 101 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 PFDA | 96 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 PFDoA | 107 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 PFTeDA | 95 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 PFHxDA | 87 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C4 PFOS | 85 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C8 FOSA | 92 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| M2-4:2 FTS | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| M2-6:2 FTS | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C2 10:2 FTS | 131 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| 13C3 HFPO-DA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d5-NEtFOSAA | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d7-N-MeFOSE-M | 88 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 20:47 | 1 |

## Client Sample ID: PWS1067-OS-042421-100
**Lab Sample ID: 320-72888-78**
**Date Collected: 04/24/21 10:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.7 | 0.42 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.7** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.72** | **J** | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.93** | **J** | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.1** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.34** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.1** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |

**Client Sample ID: PWS1067-OS-042421-100**
**Lab Sample ID: 320-72888-78**
**Date Collected: 04/24/21 10:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.46 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:37 | 05/04/21 21:25 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFDoA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *M2-4:2 FTS* | *115* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *M2-6:2 FTS* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *M2-8:2 FTS* | *117* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C2 10:2 FTS* | *144* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d5-NEtFOSAA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d-N-EtFOSA-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:25* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1069-OS-042421-100**
**Date Collected: 04/24/21 11:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-80**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.4 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.26** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 21:34 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |

## Client Sample ID: PWS1069-OS-042421-100
**Lab Sample ID: 320-72888-80**
**Date Collected: 04/24/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFUnA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C8 FOSA* | *94* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *M2-4:2 FTS* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *M2-6:2 FTS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C2 10:2 FTS* | *118* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d5-NEtFOSAA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:34* | *1* |

## Client Sample ID: PWS1059-OS-042421-100
**Lab Sample ID: 320-72888-82**
**Date Collected: 04/24/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **120** | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.1** | **J** | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.1** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **22** | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.1** | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.7** | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.3** | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.65** | **J** | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1059-OS-042421-100**
**Date Collected: 04/24/21 12:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-82**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **5.4** | **I** | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 21:43 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFUnA* | *104* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFDoA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *18O2 PFHxS* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C8 FOSA* | *104* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *M2-6:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C2 10:2 FTS* | *140* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d5-NEtFOSAA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d-N-MeFOSA-M* | *81* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 21:43* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1068-OS-042421-100**
**Date Collected: 04/24/21 13:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-84**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.59** | **J** | 1.8 | 0.53 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.5** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.0** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.2** | | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.2** | **J** | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.97** | **J** | 1.8 | 0.89 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 21:53 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *104* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:53* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:53* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:53* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:53* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 21:53* | *1* |

## Client Sample ID: PWS1068-OS-042421-100
**Lab Sample ID: 320-72888-84**
**Date Collected: 04/24/21 13:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 96 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 PFDA | 97 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 PFUnA | 95 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C8 FOSA | 94 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| M2-4:2 FTS | 92 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| M2-6:2 FTS | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| M2-8:2 FTS | 98 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C2 10:2 FTS | 104 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| 13C3 HFPO-DA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d3-NMeFOSAA | 85 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d5-NEtFOSAA | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d-N-MeFOSA-M | 75 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 21:53 | 1 |

## Client Sample ID: PWS1072-OS-042421-100
**Lab Sample ID: 320-72888-86**
**Date Collected: 04/24/21 14:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.9** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **3.3** | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.4** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1072-OS-042421-100**
**Date Collected: 04/24/21 14:15**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-86**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.7** | | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.96** | **J** | 1.7 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 22:02 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFUnA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C3 PFBS* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *18O2 PFHxS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C4 PFOS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C8 FOSA* | *89* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *M2-4:2 FTS* | *93* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *M2-6:2 FTS* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *M2-8:2 FTS* | *106* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C2 10:2 FTS* | *111* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d5-NEtFOSAA* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:02* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1074-IS-042421-100**
**Lab Sample ID: 320-72888-88**
**Date Collected: 04/24/21 15:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.9** | | 4.6 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.7** | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **4.1** | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.0** | | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.3** | | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 22:12 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:12* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:12* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:12* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:12* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:12* | *1* |

## Client Sample ID: PWS1074-IS-042421-100
**Lab Sample ID: 320-72888-88**

**Date Collected: 04/24/21 15:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 PFDoA | 101 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 PFHxDA | 91 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C3 PFBS | 83 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 18O2 PFHxS | 92 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C8 FOSA | 97 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| M2-4:2 FTS | 97 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| M2-6:2 FTS | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| 13C3 HFPO-DA | 98 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d3-NMeFOSAA | 83 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d5-NEtFOSAA | 79 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d-N-MeFOSA-M | 79 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:12 | 1 |

## Client Sample ID: PWS1065-OS-042421-100
**Lab Sample ID: 320-72888-90**

**Date Collected: 04/24/21 16:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **52** | | 4.2 | 2.0 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.2** | | 1.7 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | G | 2.6 | 2.6 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.70** | **J** | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **6.3** | | 1.7 | 0.71 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.7** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.2** | **J** | 1.7 | 0.25 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.7** | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1065-OS-042421-100**
**Date Collected: 04/24/21 16:30**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-90**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.9** | | 1.7 | 0.45 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.7 | 0.82 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 22:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFDoA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFTeDA* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 PFHxDA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C4 PFOS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C8 FOSA* | *88* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *M2-4:2 FTS* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *M2-6:2 FTS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *M2-8:2 FTS* | *112* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C2 10:2 FTS* | *117* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *13C3 HFPO-DA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:21* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1075-OS-042421-100**
**Lab Sample ID: 320-72888-92**
**Date Collected: 04/24/21 17:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.71** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.56** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.85** | **J** | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.3** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 22:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:30* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:30* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:30* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:30* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:30* | *1* |

## Client Sample ID: PWS1075-OS-042421-100
**Lab Sample ID: 320-72888-92**
**Date Collected: 04/24/21 17:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 PFDA | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 PFUnA | 82 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 PFDoA | 87 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 18O2 PFHxS | 84 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| M2-4:2 FTS | 78 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| M2-6:2 FTS | 85 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| M2-8:2 FTS | 88 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C2 10:2 FTS | 102 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d3-NMeFOSAA | 75 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d5-NEtFOSAA | 77 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d-N-MeFOSA-M | 68 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d7-N-MeFOSE-M | 74 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:30 | 1 |

## Client Sample ID: PWS1079-OS-042421-100
**Lab Sample ID: 320-72888-94**
**Date Collected: 04/24/21 18:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.93** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.5** | **J** | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1079-OS-042421-100**
**Lab Sample ID: 320-72888-94**
**Date Collected: 04/24/21 18:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.3** | **J** | 1.7 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 22:40 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C4 PFHpA* | *83* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C5 PFNA* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFTeDA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 PFHxDA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C3 PFBS* | *82* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *18O2 PFHxS* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C4 PFOS* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C8 FOSA* | *84* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *M2-4:2 FTS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *M2-6:2 FTS* | *82* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *M2-8:2 FTS* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C2 10:2 FTS* | *109* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d3-NMeFOSAA* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d5-NEtFOSAA* | *80* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 22:40* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1108-OS-042421-100**
**Date Collected: 04/24/21 08:50**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-96**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:37 | 05/04/21 22:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *112* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C2 PFHxA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C4 PFOA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 22:49* | *1* |

## Client Sample ID: PWS1108-OS-042421-100
**Lab Sample ID: 320-72888-96**

**Date Collected: 04/24/21 08:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 99 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C2 PFDoA | 105 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C2 PFTeDA | 95 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C4 PFOS | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C8 FOSA | 100 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| M2-4:2 FTS | 105 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| M2-6:2 FTS | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C2 10:2 FTS | 113 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d3-NMeFOSAA | 94 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d5-NEtFOSAA | 89 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d-N-MeFOSA-M | 83 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d7-N-MeFOSE-M | 77 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |
| d9-N-EtFOSE-M | 91 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 22:49 | 1 |

## Client Sample ID: PWS1109-OS-042421-100
**Lab Sample ID: 320-72888-98**

**Date Collected: 04/24/21 09:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.1** | | 4.4 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.4** | | 1.8 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.1** | | 1.8 | 0.51 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.4** | **J** | 1.8 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.35** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.83** | **J** | 1.8 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.62** | **J** | 1.8 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1109-OS-042421-100**
**Date Collected: 04/24/21 09:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-98**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.97** | **J** | 1.8 | 0.86 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NMeFOSE | ND | F1 | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 23:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *105* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C5 PFNA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFUnA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C8 FOSA* | *97* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *M2-6:2 FTS* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *M2-8:2 FTS* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C2 10:2 FTS* | *123* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d5-NEtFOSAA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d7-N-MeFOSE-M* | *70* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 23:27* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1159-OS-042421-100**
**Lab Sample ID: 320-72888-100**
**Date Collected: 04/24/21 10:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.55** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.55** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.54** | **J** | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:37 | 05/04/21 23:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:55* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:55* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:55* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:55* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 23:55* | *1* |

## Client Sample ID: PWS1159-OS-042421-100
**Lab Sample ID: 320-72888-100**
**Date Collected: 04/24/21 10:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 107 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 PFDA | 101 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 PFUnA | 119 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 PFDoA | 107 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 PFTeDA | 103 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 PFHxDA | 107 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C3 PFBS | 88 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C4 PFOS | 98 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| M2-4:2 FTS | 101 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| M2-8:2 FTS | 125 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C2 10:2 FTS | 127 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| 13C3 HFPO-DA | 98 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d3-NMeFOSAA | 95 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d5-NEtFOSAA | 110 | | 25 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d-N-MeFOSA-M | 86 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d-N-EtFOSA-M | 92 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d7-N-MeFOSE-M | 99 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |
| d9-N-EtFOSE-M | 98 | | 10 - 150 | 05/03/21 19:37 | 05/04/21 23:55 | 1 |

## Client Sample ID: PWS-FD02-042421
**Lab Sample ID: 320-72888-102**
**Date Collected: 04/24/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.80** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.56** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD02-042421**
**Lab Sample ID: 320-72888-102**
**Date Collected: 04/24/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:37 | 05/05/21 00:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFHxA* | *104* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C4 PFOA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C5 PFNA* | *105* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFDA* | *106* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFUnA* | *107* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFDoA* | *107* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFTeDA* | *98* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *18O2 PFHxS* | *91* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C4 PFOS* | *96* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C8 FOSA* | *108* | | *10 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *M2-4:2 FTS* | *100* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *M2-8:2 FTS* | *142* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C2 10:2 FTS* | *142* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d3-NMeFOSAA* | *97* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d5-NEtFOSAA* | *99* | | *25 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d-N-MeFOSA-M* | *83* | | *10 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d-N-EtFOSA-M* | *82* | | *10 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d7-N-MeFOSE-M* | *79* | | *10 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/03/21 19:37* | *05/05/21 00:05* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1133-OS-042421-100**
**Date Collected: 04/24/21 11:15**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-103**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.8** | | 4.6 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **5.2** | | 1.9 | 0.45 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.4** | | 1.9 | 0.54 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **3.6** | | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **8.5** | | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.38** | **J** | 1.9 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.2** | | 1.9 | 0.19 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.56** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.6** | | 1.9 | 0.53 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.24** | **J** | 1.9 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.9** | | 1.9 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.9 | 0.91 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 13:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:04* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:04* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:04* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:04* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:04* | *1* |

## Client Sample ID: PWS1133-OS-042421-100
**Lab Sample ID: 320-72888-103**

**Date Collected: 04/24/21 11:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 101 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 PFDoA | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 PFTeDA | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 PFHxDA | 91 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 18O2 PFHxS | 77 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C4 PFOS | 75 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C8 FOSA | 84 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| M2-4:2 FTS | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| M2-6:2 FTS | 78 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C2 10:2 FTS | 68 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d3-NMeFOSAA | 73 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d5-NEtFOSAA | 69 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:04 | 1 |

## Client Sample ID: PWS1116-OS-042421-100
**Lab Sample ID: 320-72888-105**

**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.0** | | 4.3 | 2.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.58** | **J** | 1.7 | 0.42 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.75** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.40** | **J** | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.4** | **J** | 1.7 | 0.72 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **16** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.26** | **J I** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.89** | **J** | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1116-OS-042421-100**
**Lab Sample ID: 320-72888-105**
**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.7** | **I** | 1.7 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.7 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 13:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C5 PFNA* | *107* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C4 PFOS* | *79* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C8 FOSA* | *89* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *M2-4:2 FTS* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *M2-6:2 FTS* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *M2-8:2 FTS* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *13C3 HFPO-DA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d3-NMeFOSAA* | *73* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d5-NEtFOSAA* | *72* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d-N-MeFOSA-M* | *71* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:13* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1175-OS-042421-100**
**Date Collected: 04/24/21 13:50**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-107**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.3** | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.1** | | 1.7 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.5** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.9** | | 1.7 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.0** | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.64 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.2** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.43** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.5** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **5.9** | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.88** | **J** | 1.7 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 13:22 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:22* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:22* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:22* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:22* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:22* | *1* |

## Client Sample ID: PWS1175-OS-042421-100
**Lab Sample ID: 320-72888-107**

**Date Collected: 04/24/21 13:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 PFDA | 91 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 PFUnA | 101 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 PFDoA | 94 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 PFTeDA | 82 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 PFHxDA | 89 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 18O2 PFHxS | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C4 PFOS | 81 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C8 FOSA | 83 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| M2-4:2 FTS | 111 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| M2-6:2 FTS | 89 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C2 10:2 FTS | 71 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d3-NMeFOSAA | 68 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d5-NEtFOSAA | 66 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d-N-MeFOSA-M | 65 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d7-N-MeFOSE-M | 92 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |
| d9-N-EtFOSE-M | 86 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:22 | 1 |

## Client Sample ID: PWS1143-OS-042421-100
**Lab Sample ID: 320-72888-109**

**Date Collected: 04/24/21 14:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.50** | **J** | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.2** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.33** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.2** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1143-OS-042421-100**
**Date Collected: 04/24/21 14:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-109**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **0.50** | **J** | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 13:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFUnA* | *83* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFDoA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFTeDA* | *74* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C4 PFOS* | *73* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C8 FOSA* | *75* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *M2-4:2 FTS* | *77* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *M2-6:2 FTS* | *76* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C2 10:2 FTS* | *69* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *13C3 HFPO-DA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d3-NMeFOSAA* | *63* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d5-NEtFOSAA* | *62* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d-N-EtFOSA-M* | *60* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |
| *d9-N-EtFOSE-M* | *75* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:32* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1162-OS-042421-100**
**Date Collected: 04/24/21 15:30**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-111**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.4 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.58** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.0** | | 1.8 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.86 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 13:41 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |
| *13C4 PFHpA* | *85* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:41* | *1* |

## Client Sample ID: PWS1162-OS-042421-100
**Lab Sample ID: 320-72888-111**

**Date Collected: 04/24/21 15:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 85 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C2 PFUnA | 78 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C2 PFTeDA | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C2 PFHxDA | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 18O2 PFHxS | 75 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C4 PFOS | 72 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C8 FOSA | 77 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| M2-4:2 FTS | 85 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| M2-6:2 FTS | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| M2-8:2 FTS | 84 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C2 10:2 FTS | 66 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| 13C3 HFPO-DA | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d3-NMeFOSAA | 64 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d5-NEtFOSAA | 61 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d-N-MeFOSA-M | 57 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d-N-EtFOSA-M | 58 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d7-N-MeFOSE-M | 76 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 13:41 | 1 |

## Client Sample ID: PWS1156-OS-042421-100
**Lab Sample ID: 320-72888-113**

**Date Collected: 04/24/21 16:55**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **13** | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **5.5** | | 1.7 | 0.42 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.3** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.75** | **J** | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.2** | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.1** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.61** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **12** | | 1.7 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.20** | **J** | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.5** | **I** | 1.7 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1156-OS-042421-100**
**Date Collected: 04/24/21 16:55**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-113**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 13:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFUnA* | *103* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *M2-4:2 FTS* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *M2-6:2 FTS* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C2 10:2 FTS* | *85* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *13C3 HFPO-DA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d3-NMeFOSAA* | *69* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d-N-EtFOSA-M* | *69* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d7-N-MeFOSE-M* | *99* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 13:50* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1053-OS-042521-100**
**Lab Sample ID: 320-72888-115**
**Date Collected: 04/25/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **41** | | 4.2 | 2.0 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.7** | | 1.7 | 0.71 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.34** | **J** | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.65** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **16** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.7** | | 1.7 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.6** | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.50** | **J** | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **24** | | 1.7 | 0.45 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | F1 | 1.7 | 0.31 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/03/21 19:43 | 05/05/21 14:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:27* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:27* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:27* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:27* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:27* | *1* |

## Client Sample ID: PWS1053-OS-042521-100
**Lab Sample ID: 320-72888-115**
**Date Collected: 04/25/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 PFDA | 92 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 PFUnA | 80 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 PFDoA | 75 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 PFTeDA | 77 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 PFHxDA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| M2-4:2 FTS | 114 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| M2-6:2 FTS | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C2 10:2 FTS | 70 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| 13C3 HFPO-DA | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d3-NMeFOSAA | 61 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d5-NEtFOSAA | 61 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d-N-MeFOSA-M | 59 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d-N-EtFOSA-M | 56 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d7-N-MeFOSE-M | 77 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |
| d9-N-EtFOSE-M | 76 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 14:27 | 1 |

## Client Sample ID: PWS1077-OS-042521-100
**Lab Sample ID: 320-72888-117**
**Date Collected: 04/25/21 09:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.3** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.71** | **J** | 1.8 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **J** | 1.8 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1077-OS-042521-100**
**Lab Sample ID: 320-72888-117**
**Date Collected: 04/25/21 09:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:43 | 05/05/21 14:54 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFUnA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFTeDA* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C4 PFOS* | *78* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *M2-6:2 FTS* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *M2-8:2 FTS* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C2 10:2 FTS* | *71* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d3-NMeFOSAA* | *65* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d5-NEtFOSAA* | *67* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d-N-EtFOSA-M* | *63* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 14:54* | *1* |

## Client Sample ID: PWS-FD01-042521
**Lab Sample ID: 320-72888-119**

**Date Collected: 04/25/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.3** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.61** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | | 1.7 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.79** | **J** | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.7 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 15:03 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:03* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:03* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:03* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:03* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:03* | *1* |

## Client Sample ID: PWS-FD01-042521
**Lab Sample ID: 320-72888-119**

**Date Collected: 04/25/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 99 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 PFDA | 108 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 PFUnA | 98 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 PFDoA | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 PFTeDA | 85 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 PFHxDA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C3 PFBS | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| M2-4:2 FTS | 110 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| M2-6:2 FTS | 96 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| M2-8:2 FTS | 96 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C2 10:2 FTS | 74 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| 13C3 HFPO-DA | 95 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d3-NMeFOSAA | 67 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d5-NEtFOSAA | 66 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d-N-MeFOSA-M | 66 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d-N-EtFOSA-M | 62 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |
| d9-N-EtFOSE-M | 94 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:03 | 1 |

## Client Sample ID: PWS1083-OS-042521-100
**Lab Sample ID: 320-72888-120**

**Date Collected: 04/25/21 10:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.0** | **J** | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.45** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1083-OS-042521-100**
**Lab Sample ID: 320-72888-120**
**Date Collected: 04/25/21 10:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.0** | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 15:12 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *18O2 PFHxS* | *85* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C4 PFOS* | *78* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *M2-6:2 FTS* | *75* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *M2-8:2 FTS* | *61* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C2 10:2 FTS* | *66* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d3-NMeFOSAA* | *52* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d5-NEtFOSAA* | *60* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d-N-MeFOSA-M* | *67* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |
| *d9-N-EtFOSE-M* | *66* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:12* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1046-OS-042521-100**
**Lab Sample ID: 320-72888-122**
**Date Collected: 04/25/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **21** | | 4.2 | 2.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **5.6** | | 1.7 | 0.41 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **6.1** | | 1.7 | 0.48 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **3.1** | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **11** | | 1.7 | 0.71 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.39** | **J** | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.0** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.58** | **J** | 1.7 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.7** | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **5.7** | | 1.7 | 0.45 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.88** | **J** | 1.7 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/03/21 19:43 | 05/05/21 15:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:21* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:21* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:21* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:21* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:21* | *1* |

## Client Sample ID: PWS1046-OS-042521-100
**Lab Sample ID: 320-72888-122**
**Date Collected: 04/25/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 103 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 PFDA | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 PFUnA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 PFDoA | 94 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 PFTeDA | 91 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C3 PFBS | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C8 FOSA | 85 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| M2-4:2 FTS | 138 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| M2-6:2 FTS | 103 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| M2-8:2 FTS | 98 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C2 10:2 FTS | 70 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d3-NMeFOSAA | 67 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d5-NEtFOSAA | 67 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d-N-MeFOSA-M | 74 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d-N-EtFOSA-M | 63 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d7-N-MeFOSE-M | 86 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:21 | 1 |

## Client Sample ID: PWS1081-OS-042521-100
**Lab Sample ID: 320-72888-124**
**Date Collected: 04/25/21 12:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.7 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.2** | | 1.9 | 0.19 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.37** | **J** | 1.9 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.9 | 0.53 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1081-OS-042521-100**
**Lab Sample ID: 320-72888-124**
**Date Collected: 04/25/21 12:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.9 | 0.92 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/03/21 19:43 | 05/05/21 15:31 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFDA* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C4 PFOS* | *76* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *M2-4:2 FTS* | *77* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *M2-6:2 FTS* | *70* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *M2-8:2 FTS* | *64* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C2 10:2 FTS* | *69* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *13C3 HFPO-DA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d3-NMeFOSAA* | *52* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d5-NEtFOSAA* | *53* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |
| *d9-N-EtFOSE-M* | *66* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:31* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1029-OS-042521-100**
**Lab Sample ID: 320-72888-126**
**Date Collected: 04/25/21 14:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.4** | **J** | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.31** | **J** | 1.7 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.70** | **J** | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.7 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.60** | **J** | 1.7 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.6** | | 1.7 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.84 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 15:40 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *68* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:40* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:40* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:40* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:40* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:40* | *1* |

## Client Sample ID: PWS1029-OS-042521-100
**Lab Sample ID: 320-72888-126**

**Date Collected: 04/25/21 14:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 95 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 PFDA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 PFDoA | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 PFTeDA | 77 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 PFHxDA | 88 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 18O2 PFHxS | 76 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C4 PFOS | 76 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C8 FOSA | 80 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| M2-4:2 FTS | 124 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| M2-6:2 FTS | 93 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| M2-8:2 FTS | 71 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C2 10:2 FTS | 62 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| 13C3 HFPO-DA | 95 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d3-NMeFOSAA | 52 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d5-NEtFOSAA | 51 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d-N-MeFOSA-M | 60 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d-N-EtFOSA-M | 52 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d7-N-MeFOSE-M | 54 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |
| d9-N-EtFOSE-M | 55 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 15:40 | 1 |

## Client Sample ID: PWS1144-OS-042521-100
**Lab Sample ID: 320-72888-130**

**Date Collected: 04/25/21 09:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.7 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.52** | **J** | 1.9 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.64** | **J** | 1.9 | 0.54 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.30** | **J** | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.4** | **J** | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.9** | | 1.9 | 0.19 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.66** | **J** | 1.9 | 0.53 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1144-OS-042521-100**
**Lab Sample ID: 320-72888-130**
**Date Collected: 04/25/21 09:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J** | 1.9 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.9 | 0.92 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 15:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 PFHxDA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *18O2 PFHxS* | *73* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *M2-4:2 FTS* | *83* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *M2-6:2 FTS* | *67* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *M2-8:2 FTS* | *71* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C2 10:2 FTS* | *65* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d3-NMeFOSAA* | *63* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d5-NEtFOSAA* | *65* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d-N-MeFOSA-M* | *62* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d-N-EtFOSA-M* | *61* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 15:49* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

**Client Sample ID: PWS1165-OS-042521-100**
**Date Collected: 04/25/21 11:35**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-132**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.56** | **J** | 1.8 | 0.53 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.83** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.60** | **J** | 1.8 | 0.52 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.82** | **J I** | 1.8 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.8 | 0.89 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:43 | 05/05/21 16:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:27* | *1* |
| *13C5 PFPeA* | *98* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:27* | *1* |
| *13C2 PFHxA* | *102* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:27* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:27* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:27* | *1* |

## Client Sample ID: PWS1165-OS-042521-100
**Lab Sample ID: 320-72888-132**

**Date Collected: 04/25/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 104 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 PFDA | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 PFUnA | 108 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 PFDoA | 101 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 PFTeDA | 100 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 PFHxDA | 106 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 18O2 PFHxS | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C8 FOSA | 80 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| M2-4:2 FTS | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| M2-6:2 FTS | 79 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| M2-8:2 FTS | 69 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C2 10:2 FTS | 80 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| 13C3 HFPO-DA | 110 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d3-NMeFOSAA | 57 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d5-NEtFOSAA | 63 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d-N-EtFOSA-M | 72 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d7-N-MeFOSE-M | 81 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:27 | 1 |

## Client Sample ID: PWS-FD02-042521
**Lab Sample ID: 320-72888-134**

**Date Collected: 04/25/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.52 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.68** | **J** | 1.8 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.29** | **J I** | 1.8 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.72** | **J** | 1.8 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD02-042521**
**Lab Sample ID: 320-72888-134**
**Date Collected: 04/25/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **0.75** | **J I** | 1.8 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.8 | 0.88 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/03/21 19:43 | 05/05/21 16:36 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C5 PFPeA* | *102* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C4 PFOA* | *106* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFDA* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C8 FOSA* | *83* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *M2-4:2 FTS* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *M2-6:2 FTS* | *91* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *M2-8:2 FTS* | *108* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d5-NEtFOSAA* | *69* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 16:36* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1078-OS-042521-100**
**Lab Sample ID: 320-72888-137**
**Date Collected: 04/25/21 15:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.56** | **J** | 1.9 | 0.54 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.9 | 0.19 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.84** | **J** | 1.9 | 0.53 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.50 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | **J** | 1.9 | 0.91 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 16:45 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:45* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:45* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:45* | *1* |
| *13C4 PFHpA* | *105* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:45* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 16:45* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1078-OS-042521-100**
**Lab Sample ID: 320-72888-137**
**Date Collected: 04/25/21 15:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 98 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 PFDA | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 PFUnA | 94 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 PFDoA | 96 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 PFHxDA | 97 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C3 PFBS | 81 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C4 PFOS | 74 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C8 FOSA | 78 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| M2-4:2 FTS | 83 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| M2-6:2 FTS | 78 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| M2-8:2 FTS | 87 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C2 10:2 FTS | 66 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| 13C3 HFPO-DA | 98 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d3-NMeFOSAA | 72 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d5-NEtFOSAA | 70 | | 25 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d-N-EtFOSA-M | 61 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |
| d9-N-EtFOSE-M | 92 | | 10 - 150 | 05/03/21 19:43 | 05/05/21 16:45 | 1 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-72888-1 | PWS1049-OS-042122-100 | 88 | 92 | 105 | 108 | 100 | 104 | 103 | 108 |
| 320-72888-3 | PWS-FD01-042221 | 83 | 90 | 105 | 102 | 101 | 104 | 96 | 100 |
| 320-72888-4 | PWS1051-OS-042221-100 | 75 | 82 | 84 | 87 | 89 | 94 | 82 | 89 |
| 320-72888-6 | PWS1047-OS-042221-100 | 74 | 81 | 87 | 90 | 85 | 76 | 86 | 88 |
| 320-72888-8 | PWS1055-OS-042221-100 | 78 | 85 | 87 | 92 | 95 | 95 | 90 | 86 |
| 320-72888-10 | PWS1054-OS-042221-100 | 81 | 84 | 81 | 84 | 92 | 90 | 94 | 94 |
| 320-72888-12 | PWS1048-OS-042221-100 | 72 | 81 | 81 | 95 | 92 | 91 | 86 | 87 |
| 320-72888-14 | PWS1152-OS-042221-100 | 74 | 81 | 92 | 90 | 92 | 96 | 78 | 84 |
| 320-72888-16 | PWS-FD02-042221 | 87 | 88 | 90 | 101 | 96 | 98 | 101 | 91 |
| 320-72888-17 | PWS1151-OS-042221-100 | 91 | 86 | 104 | 102 | 99 | 90 | 90 | 103 |
| 320-72888-17 MS | PWS-MS02-042221 | 89 | 91 | 99 | 94 | 101 | 96 | 102 | 95 |
| 320-72888-17 MSD | PWS-MSD02-042221 | 85 | 92 | 106 | 104 | 108 | 96 | 95 | 89 |
| 320-72888-19 | PWS1139-OS-042221-100 | 89 | 104 | 111 | 110 | 104 | 109 | 104 | 104 |
| 320-72888-21 | PWS1146-OS-042221-100 | 83 | 88 | 85 | 87 | 97 | 93 | 93 | 91 |
| 320-72888-23 | PWS1138-OS-042221-100 | 81 | 87 | 96 | 98 | 98 | 102 | 98 | 94 |
| 320-72888-25 | PWS1120-OS-042221-100 | 88 | 83 | 87 | 99 | 100 | 85 | 94 | 95 |
| 320-72888-27 | PWS1122-OS-042221-100 | 79 | 81 | 93 | 98 | 98 | 106 | 97 | 100 |
| 320-72888-29 | PWS1119-OS-042221-100 | 90 | 96 | 100 | 110 | 98 | 95 | 93 | 100 |
| 320-72888-31 | PWS1173-OS-042221-100 | 81 | 92 | 98 | 94 | 104 | 96 | 96 | 92 |
| 320-72888-33 | PWS1030-OS-042321-100 | 82 | 80 | 86 | 94 | 98 | 100 | 91 | 91 |
| 320-72888-35 | PWS-FD01-042321 | 77 | 79 | 89 | 91 | 96 | 94 | 96 | 105 |
| 320-72888-36 | PWS1016-OS-042122-100 | 92 | 87 | 95 | 84 | 94 | 97 | 93 | 101 |
| 320-72888-36 MS | PWS-MS01-042321 | 89 | 81 | 92 | 89 | 95 | 102 | 103 | 101 |
| 320-72888-36 MSD | PWS-MSD01-042321 | 85 | 85 | 88 | 89 | 97 | 101 | 94 | 101 |
| 320-72888-38 | PWS1037-OS-042321-100 | 91 | 89 | 95 | 83 | 95 | 93 | 92 | 100 |
| 320-72888-40 | PWS1041-OS-042321-100 | 88 | 85 | 92 | 88 | 95 | 99 | 96 | 97 |
| 320-72888-42 | PWS1045-OS-042321-100 | 84 | 77 | 84 | 84 | 96 | 97 | 94 | 97 |
| 320-72888-44 | PWS1057-OS-042321-100 | 93 | 87 | 95 | 96 | 95 | 96 | 95 | 98 |
| 320-72888-46 | PWS1056-OS-042321-100 | 88 | 84 | 99 | 94 | 99 | 96 | 94 | 94 |
| 320-72888-48 | PWS1058-OS-042321-100 | 92 | 84 | 104 | 93 | 96 | 91 | 88 | 92 |
| 320-72888-50 | PWS1061-OS-042321-100 | 93 | 94 | 93 | 91 | 94 | 88 | 82 | 94 |
| 320-72888-52 | PWS1060-OS-042321-100 | 100 | 95 | 104 | 98 | 99 | 103 | 100 | 103 |
| 320-72888-54 | PWS1039-OS-042321-100 | 99 | 90 | 114 | 102 | 108 | 100 | 94 | 104 |
| 320-72888-56 | PWS1176-OS-042321-100 | 76 | 71 | 90 | 87 | 92 | 88 | 88 | 92 |
| 320-72888-58 | PWS1142-OS-042321-100 | 92 | 89 | 100 | 90 | 97 | 93 | 90 | 96 |
| 320-72888-60 | PWS-FD02-042321 | 88 | 87 | 101 | 86 | 97 | 86 | 84 | 96 |
| 320-72888-61 | PWS1137-OS-042321-100 | 97 | 90 | 96 | 90 | 101 | 90 | 85 | 87 |
| 320-72888-63 | PWS1131-OS-042321-100 | 91 | 79 | 96 | 92 | 92 | 85 | 84 | 87 |
| 320-72888-65 | PWS1126-OS-042321-100 | 93 | 84 | 103 | 98 | 102 | 94 | 95 | 92 |
| 320-72888-67 | PWS1123-OS-042321-100 | 91 | 78 | 90 | 87 | 97 | 91 | 93 | 100 |
| 320-72888-69 | PWS1117-OS-042321-100 | 83 | 78 | 90 | 89 | 88 | 97 | 92 | 87 |
| 320-72888-71 | PWS1107-OS-042321-100 | 100 | 91 | 100 | 98 | 90 | 98 | 95 | 95 |
| 320-72888-73 | PWS1062-OS-042421-100 | 88 | 90 | 86 | 93 | 91 | 91 | 89 | 87 |
| 320-72888-73 MS | PWS-MS01-042401 | 97 | 94 | 96 | 95 | 90 | 97 | 93 | 92 |
| 320-72888-73 MSD | PWS-MSD01-042401 | 98 | 91 | 96 | 96 | 96 | 103 | 87 | 92 |
| 320-72888-75 | PWS1064-OS-042421-100 | 105 | 101 | 101 | 102 | 101 | 101 | 100 | 107 |
| 320-72888-77 | PWS-FD01-042421 | 97 | 93 | 94 | 96 | 90 | 101 | 96 | 99 |
| 320-72888-78 | PWS1067-OS-042421-100 | 85 | 89 | 99 | 100 | 93 | 100 | 92 | 100 |
| 320-72888-80 | PWS1069-OS-042421-100 | 99 | 91 | 99 | 93 | 97 | 94 | 91 | 84 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-72888-82 | PWS1059-OS-042421-100 | 96 | 101 | 100 | 100 | 98 | 101 | 92 | 104 |
| 320-72888-84 | PWS1068-OS-042421-100 | 104 | 95 | 96 | 94 | 97 | 96 | 97 | 95 |
| 320-72888-86 | PWS1072-OS-042421-100 | 92 | 82 | 97 | 91 | 96 | 93 | 88 | 95 |
| 320-72888-88 | PWS1074-IS-042421-100 | 103 | 86 | 98 | 101 | 96 | 94 | 94 | 100 |
| 320-72888-90 | PWS1065-OS-042421-100 | 96 | 90 | 90 | 94 | 91 | 91 | 96 | 91 |
| 320-72888-92 | PWS1075-OS-042421-100 | 94 | 85 | 86 | 84 | 91 | 93 | 93 | 82 |
| 320-72888-94 | PWS1079-OS-042421-100 | 87 | 88 | 90 | 83 | 87 | 86 | 92 | 89 |
| 320-72888-96 | PWS1108-OS-042421-100 | 112 | 99 | 103 | 107 | 103 | 103 | 98 | 99 |
| 320-72888-98 | PWS1109-OS-042421-100 | 105 | 94 | 101 | 95 | 97 | 98 | 88 | 99 |
| 320-72888-98 MS | PWS-MS02-042421 | 100 | 87 | 103 | 93 | 99 | 105 | 98 | 97 |
| 320-72888-98 MSD | PWS-MSD02-042421 | 102 | 87 | 98 | 98 | 98 | 102 | 91 | 103 |
| 320-72888-100 | PWS1159-OS-042421-100 | 92 | 88 | 92 | 97 | 96 | 107 | 101 | 119 |
| 320-72888-102 | PWS-FD02-042421 | 87 | 84 | 104 | 97 | 103 | 105 | 106 | 107 |
| 320-72888-103 | PWS1133-OS-042421-100 | 88 | 87 | 89 | 98 | 97 | 101 | 89 | 100 |
| 320-72888-105 | PWS1116-OS-042421-100 | 90 | 91 | 98 | 102 | 97 | 107 | 100 | 94 |
| 320-72888-107 | PWS1175-OS-042421-100 | 75 | 89 | 94 | 106 | 97 | 87 | 91 | 101 |
| 320-72888-109 | PWS1143-OS-042421-100 | 84 | 86 | 86 | 90 | 92 | 97 | 89 | 83 |
| 320-72888-111 | PWS1162-OS-042421-100 | 77 | 78 | 87 | 85 | 95 | 90 | 85 | 78 |
| 320-72888-113 | PWS1156-OS-042421-100 | 90 | 95 | 100 | 104 | 95 | 104 | 96 | 103 |
| 320-72888-115 | PWS1053-OS-042521-100 | 70 | 77 | 87 | 91 | 102 | 87 | 92 | 80 |
| 320-72888-115 MS | PWS-MS01-042521 | 77 | 87 | 98 | 106 | 97 | 101 | 85 | 89 |
| 320-72888-115 MSD | PWS-MSD01-042521 | 66 | 79 | 90 | 95 | 102 | 91 | 85 | 81 |
| 320-72888-117 | PWS1077-OS-042521-100 | 82 | 95 | 97 | 101 | 97 | 102 | 92 | 90 |
| 320-72888-119 | PWS-FD01-042521 | 88 | 93 | 101 | 97 | 104 | 99 | 108 | 98 |
| 320-72888-120 | PWS1083-OS-042521-100 | 87 | 94 | 86 | 95 | 97 | 96 | 86 | 93 |
| 320-72888-122 | PWS1046-OS-042521-100 | 79 | 86 | 92 | 93 | 92 | 103 | 97 | 88 |
| 320-72888-124 | PWS1081-OS-042521-100 | 92 | 91 | 94 | 97 | 97 | 95 | 84 | 97 |
| 320-72888-126 | PWS1029-OS-042521-100 | 68 | 80 | 92 | 100 | 98 | 95 | 88 | 87 |
| 320-72888-130 | PWS1144-OS-042521-100 | 87 | 90 | 93 | 96 | 94 | 92 | 92 | 88 |
| 320-72888-132 | PWS1165-OS-042521-100 | 97 | 98 | 102 | 110 | 97 | 104 | 97 | 108 |
| 320-72888-134 | PWS-FD02-042521 | 86 | 102 | 96 | 100 | 106 | 103 | 101 | 97 |
| 320-72888-137 | PWS1078-OS-042521-100 | 83 | 87 | 92 | 105 | 97 | 98 | 83 | 94 |
| LCS 320-485143/2-A | Lab Control Sample | 95 | 93 | 96 | 91 | 94 | 95 | 100 | 97 |
| LCS 320-485144/2-A | Lab Control Sample | 106 | 98 | 113 | 100 | 102 | 99 | 97 | 104 |
| LCS 320-485554/2-A | Lab Control Sample | 100 | 93 | 93 | 102 | 89 | 97 | 94 | 93 |
| LCS 320-485555/2-A | Lab Control Sample | 92 | 82 | 90 | 97 | 95 | 92 | 91 | 97 |
| LCS 320-485957/2-A | Lab Control Sample | 89 | 84 | 92 | 96 | 99 | 102 | 93 | 97 |
| LCSD 320-485144/3-A | Lab Control Sample Dup | 85 | 88 | 91 | 80 | 87 | 84 | 77 | 78 |
| MB 320-485143/1-A | Method Blank | 99 | 89 | 92 | 91 | 93 | 91 | 89 | 92 |
| MB 320-485144/1-A | Method Blank | 92 | 91 | 101 | 96 | 98 | 89 | 88 | 94 |
| MB 320-485554/1-A | Method Blank | 84 | 78 | 81 | 76 | 75 | 76 | 78 | 78 |
| MB 320-485555/1-A | Method Blank | 99 | 100 | 100 | 110 | 104 | 104 | 99 | 108 |
| MB 320-485957/1-A | Method Blank | 85 | 86 | 89 | 97 | 99 | 100 | 94 | 100 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72888-1 | PWS1049-OS-042122-100 | 96 | 99 | 105 | 88 | 90 | 90 | 93 | 129 |
| 320-72888-3 | PWS-FD01-042221 | 109 | 100 | 101 | 86 | 90 | 82 | 87 | 118 |
| 320-72888-4 | PWS1051-OS-042221-100 | 88 | 78 | 85 | 72 | 71 | 72 | 73 | 82 |
| 320-72888-6 | PWS1047-OS-042221-100 | 84 | 90 | 86 | 69 | 75 | 66 | 74 | 85 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72888-8 | PWS1055-OS-042221-100 | 88 | 79 | 83 | 75 | 75 | 73 | 80 | 73 |
| 320-72888-10 | PWS1054-OS-042221-100 | 80 | 87 | 85 | 72 | 72 | 73 | 77 | 69 |
| 320-72888-12 | PWS1048-OS-042221-100 | 89 | 83 | 90 | 74 | 77 | 76 | 75 | 138 |
| 320-72888-14 | PWS1152-OS-042221-100 | 84 | 82 | 81 | 77 | 73 | 71 | 76 | 85 |
| 320-72888-16 | PWS-FD02-042221 | 86 | 91 | 93 | 85 | 82 | 74 | 86 | 109 |
| 320-72888-17 | PWS1151-OS-042221-100 | 93 | 98 | 94 | 86 | 85 | 80 | 85 | 104 |
| 320-72888-17 MS | PWS-MS02-042221 | 89 | 90 | 96 | 81 | 88 | 84 | 82 | 103 |
| 320-72888-17 MSD | PWS-MSD02-042221 | 87 | 95 | 93 | 86 | 87 | 81 | 82 | 96 |
| 320-72888-19 | PWS1139-OS-042221-100 | 108 | 110 | 109 | 90 | 98 | 89 | 96 | 137 |
| 320-72888-21 | PWS1146-OS-042221-100 | 98 | 88 | 94 | 74 | 75 | 73 | 81 | 82 |
| 320-72888-23 | PWS1138-OS-042221-100 | 87 | 91 | 94 | 90 | 83 | 79 | 85 | 145 |
| 320-72888-25 | PWS1120-OS-042221-100 | 90 | 96 | 92 | 77 | 82 | 77 | 78 | 88 |
| 320-72888-27 | PWS1122-OS-042221-100 | 88 | 97 | 95 | 83 | 78 | 83 | 89 | 133 |
| 320-72888-29 | PWS1119-OS-042221-100 | 96 | 99 | 98 | 92 | 82 | 80 | 86 | 86 |
| 320-72888-31 | PWS1173-OS-042221-100 | 89 | 90 | 90 | 84 | 85 | 79 | 80 | 135 |
| 320-72888-33 | PWS1030-OS-042321-100 | 95 | 85 | 101 | 86 | 87 | 89 | 97 | 97 |
| 320-72888-35 | PWS-FD01-042321 | 106 | 102 | 111 | 77 | 91 | 90 | 104 | 86 |
| 320-72888-36 | PWS1016-OS-042122-100 | 103 | 100 | 104 | 84 | 90 | 93 | 95 | 98 |
| 320-72888-36 MS | PWS-MS01-042321 | 102 | 104 | 109 | 83 | 92 | 96 | 101 | 92 |
| 320-72888-36 MSD | PWS-MSD01-042321 | 98 | 100 | 101 | 86 | 91 | 95 | 98 | 97 |
| 320-72888-38 | PWS1037-OS-042321-100 | 99 | 104 | 104 | 84 | 86 | 88 | 93 | 95 |
| 320-72888-40 | PWS1041-OS-042321-100 | 100 | 97 | 97 | 84 | 93 | 91 | 93 | 91 |
| 320-72888-42 | PWS1045-OS-042321-100 | 92 | 93 | 96 | 80 | 85 | 87 | 86 | 87 |
| 320-72888-44 | PWS1057-OS-042321-100 | 92 | 92 | 86 | 89 | 86 | 93 | 96 | 85 |
| 320-72888-46 | PWS1056-OS-042321-100 | 93 | 92 | 84 | 80 | 88 | 96 | 105 | 82 |
| 320-72888-48 | PWS1058-OS-042321-100 | 89 | 83 | 78 | 85 | 92 | 89 | 100 | 77 |
| 320-72888-50 | PWS1061-OS-042321-100 | 89 | 87 | 80 | 86 | 81 | 87 | 95 | 75 |
| 320-72888-52 | PWS1060-OS-042321-100 | 97 | 94 | 82 | 90 | 93 | 94 | 109 | 74 |
| 320-72888-54 | PWS1039-OS-042321-100 | 103 | 96 | 93 | 93 | 102 | 100 | 104 | 83 |
| 320-72888-56 | PWS1176-OS-042321-100 | 89 | 86 | 80 | 80 | 82 | 88 | 95 | 96 |
| 320-72888-58 | PWS1142-OS-042321-100 | 88 | 89 | 79 | 85 | 87 | 91 | 98 | 85 |
| 320-72888-60 | PWS-FD02-042321 | 90 | 87 | 74 | 89 | 89 | 89 | 99 | 84 |
| 320-72888-61 | PWS1137-OS-042321-100 | 84 | 80 | 74 | 88 | 88 | 84 | 96 | 84 |
| 320-72888-63 | PWS1131-OS-042321-100 | 84 | 85 | 79 | 78 | 89 | 87 | 95 | 78 |
| 320-72888-65 | PWS1126-OS-042321-100 | 94 | 90 | 82 | 89 | 91 | 92 | 99 | 90 |
| 320-72888-67 | PWS1123-OS-042321-100 | 93 | 88 | 82 | 87 | 86 | 94 | 98 | 88 |
| 320-72888-69 | PWS1117-OS-042321-100 | 86 | 81 | 90 | 77 | 85 | 85 | 93 | 99 |
| 320-72888-71 | PWS1107-OS-042321-100 | 97 | 86 | 91 | 93 | 87 | 88 | 96 | 95 |
| 320-72888-73 | PWS1062-OS-042421-100 | 90 | 84 | 86 | 81 | 84 | 85 | 89 | 79 |
| 320-72888-73 MS | PWS-MS01-042401 | 97 | 86 | 92 | 82 | 91 | 86 | 86 | 77 |
| 320-72888-73 MSD | PWS-MSD01-042401 | 98 | 90 | 93 | 93 | 87 | 86 | 94 | 83 |
| 320-72888-75 | PWS1064-OS-042421-100 | 109 | 97 | 97 | 88 | 94 | 88 | 101 | 91 |
| 320-72888-77 | PWS-FD01-042421 | 107 | 95 | 87 | 89 | 93 | 85 | 92 | 93 |
| 320-72888-78 | PWS1067-OS-042421-100 | 101 | 94 | 95 | 85 | 90 | 88 | 93 | 115 |
| 320-72888-80 | PWS1069-OS-042421-100 | 93 | 86 | 87 | 84 | 88 | 84 | 94 | 92 |
| 320-72888-82 | PWS1059-OS-042421-100 | 103 | 92 | 97 | 94 | 92 | 90 | 104 | 95 |
| 320-72888-84 | PWS1068-OS-042421-100 | 98 | 89 | 86 | 90 | 91 | 90 | 94 | 92 |
| 320-72888-86 | PWS1072-OS-042421-100 | 95 | 86 | 87 | 83 | 91 | 87 | 89 | 93 |
| 320-72888-88 | PWS1074-IS-042421-100 | 101 | 89 | 91 | 83 | 92 | 88 | 97 | 97 |
| 320-72888-90 | PWS1065-OS-042421-100 | 98 | 81 | 88 | 81 | 87 | 87 | 88 | 100 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72888-92 | PWS1075-OS-042421-100 | 87 | 78 | 82 | 84 | 84 | 80 | 86 | 78 |
| 320-72888-94 | PWS1079-OS-042421-100 | 84 | 89 | 89 | 82 | 80 | 80 | 84 | 84 |
| 320-72888-96 | PWS1108-OS-042421-100 | 105 | 95 | 94 | 94 | 91 | 89 | 100 | 105 |
| 320-72888-98 | PWS1109-OS-042421-100 | 94 | 88 | 94 | 94 | 88 | 91 | 97 | 95 |
| 320-72888-98 MS | PWS-MS02-042421 | 92 | 88 | 91 | 88 | 90 | 92 | 91 | 97 |
| 320-72888-98 MSD | PWS-MSD02-042421 | 97 | 94 | 98 | 96 | 97 | 91 | 93 | 102 |
| 320-72888-100 | PWS1159-OS-042421-100 | 107 | 103 | 107 | 88 | 93 | 98 | 99 | 101 |
| 320-72888-102 | PWS-FD02-042421 | 107 | 98 | 103 | 84 | 91 | 96 | 108 | 100 |
| 320-72888-103 | PWS1133-OS-042421-100 | 87 | 86 | 91 | 84 | 77 | 75 | 84 | 83 |
| 320-72888-105 | PWS1116-OS-042421-100 | 95 | 87 | 98 | 85 | 86 | 79 | 89 | 94 |
| 320-72888-107 | PWS1175-OS-042421-100 | 94 | 82 | 89 | 84 | 84 | 81 | 83 | 111 |
| 320-72888-109 | PWS1143-OS-042421-100 | 86 | 74 | 82 | 84 | 81 | 73 | 75 | 77 |
| 320-72888-111 | PWS1162-OS-042421-100 | 88 | 84 | 83 | 74 | 75 | 72 | 77 | 85 |
| 320-72888-113 | PWS1156-OS-042421-100 | 84 | 85 | 91 | 88 | 90 | 84 | 90 | 92 |
| 320-72888-115 | PWS1053-OS-042521-100 | 75 | 77 | 88 | 77 | 82 | 77 | 86 | 114 |
| 320-72888-115 MS | PWS-MS01-042521 | 82 | 87 | 98 | 80 | 93 | 79 | 80 | 126 |
| 320-72888-115 MSD | PWS-MSD01-042521 | 75 | 75 | 88 | 72 | 77 | 81 | 76 | 118 |
| 320-72888-117 | PWS1077-OS-042521-100 | 89 | 84 | 99 | 79 | 86 | 78 | 82 | 106 |
| 320-72888-119 | PWS-FD01-042521 | 86 | 85 | 88 | 86 | 82 | 80 | 95 | 110 |
| 320-72888-120 | PWS1083-OS-042521-100 | 94 | 92 | 97 | 80 | 85 | 78 | 82 | 86 |
| 320-72888-122 | PWS1046-OS-042521-100 | 94 | 91 | 100 | 86 | 82 | 86 | 85 | 138 |
| 320-72888-124 | PWS1081-OS-042521-100 | 96 | 97 | 99 | 88 | 89 | 76 | 82 | 77 |
| 320-72888-126 | PWS1029-OS-042521-100 | 83 | 77 | 88 | 74 | 76 | 76 | 80 | 124 |
| 320-72888-130 | PWS1144-OS-042521-100 | 93 | 83 | 86 | 79 | 73 | 77 | 78 | 83 |
| 320-72888-132 | PWS1165-OS-042521-100 | 101 | 100 | 106 | 87 | 87 | 86 | 80 | 97 |
| 320-72888-134 | PWS-FD02-042521 | 96 | 86 | 92 | 80 | 84 | 83 | 83 | 101 |
| 320-72888-137 | PWS1078-OS-042521-100 | 96 | 83 | 97 | 81 | 83 | 74 | 78 | 83 |
| LCS 320-485143/2-A | Lab Control Sample | 96 | 100 | 95 | 91 | 96 | 90 | 95 | 107 |
| LCS 320-485144/2-A | Lab Control Sample | 99 | 101 | 90 | 99 | 98 | 95 | 101 | 78 |
| LCS 320-485554/2-A | Lab Control Sample | 94 | 89 | 85 | 85 | 86 | 83 | 86 | 102 |
| LCS 320-485555/2-A | Lab Control Sample | 94 | 89 | 90 | 82 | 84 | 83 | 82 | 77 |
| LCS 320-485957/2-A | Lab Control Sample | 95 | 98 | 88 | 87 | 82 | 79 | 81 | 71 |
| LCSD 320-485144/3-A | Lab Control Sample Dup | 86 | 77 | 78 | 77 | 79 | 81 | 82 | 68 |
| MB 320-485143/1-A | Method Blank | 103 | 98 | 91 | 91 | 90 | 88 | 91 | 99 |
| MB 320-485144/1-A | Method Blank | 94 | 90 | 77 | 83 | 90 | 84 | 95 | 86 |
| MB 320-485554/1-A | Method Blank | 77 | 71 | 70 | 70 | 69 | 71 | 71 | 79 |
| MB 320-485555/1-A | Method Blank | 115 | 109 | 108 | 95 | 94 | 88 | 87 | 86 |
| MB 320-485957/1-A | Method Blank | 85 | 80 | 91 | 85 | 80 | 80 | 77 | 74 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72888-1 | PWS1049-OS-042122-100 | 92 | 107 | 94 | 105 | 80 | 85 | 77 | 74 |
| 320-72888-3 | PWS-FD01-042221 | 82 | 92 | 81 | 99 | 66 | 68 | 74 | 71 |
| 320-72888-4 | PWS1051-OS-042221-100 | 80 | 91 | 67 | 86 | 68 | 69 | 59 | 60 |
| 320-72888-6 | PWS1047-OS-042221-100 | 57 | 66 | 68 | 87 | 49 | 55 | 63 | 65 |
| 320-72888-8 | PWS1055-OS-042221-100 | 76 | 95 | 70 | 88 | 71 | 69 | 66 | 60 |
| 320-72888-10 | PWS1054-OS-042221-100 | 79 | 84 | 69 | 84 | 72 | 73 | 61 | 64 |
| 320-72888-12 | PWS1048-OS-042221-100 | 90 | 86 | 75 | 86 | 68 | 61 | 64 | 66 |
| 320-72888-14 | PWS1152-OS-042221-100 | 70 | 72 | 65 | 89 | 51 | 50 | 62 | 64 |
| 320-72888-16 | PWS-FD02-042221 | 81 | 109 | 76 | 89 | 74 | 73 | 71 | 73 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72888-17 | PWS1151-OS-042221-100 | 78 | 64 | 72 | 96 | 65 | 64 | 76 | 70 |
| 320-72888-17 MS | PWS-MS02-042221 | 72 | 64 | 63 | 93 | 58 | 53 | 77 | 69 |
| 320-72888-17 MSD | PWS-MSD02-042221 | 84 | 89 | 77 | 94 | 71 | 73 | 75 | 69 |
| 320-72888-19 | PWS1139-OS-042221-100 | 93 | 85 | 74 | 105 | 67 | 68 | 83 | 82 |
| 320-72888-21 | PWS1146-OS-042221-100 | 75 | 77 | 70 | 89 | 69 | 68 | 66 | 59 |
| 320-72888-23 | PWS1138-OS-042221-100 | 93 | 96 | 75 | 94 | 69 | 74 | 70 | 65 |
| 320-72888-25 | PWS1120-OS-042221-100 | 71 | 71 | 70 | 90 | 54 | 64 | 74 | 69 |
| 320-72888-27 | PWS1122-OS-042221-100 | 97 | 99 | 92 | 93 | 77 | 69 | 74 | 73 |
| 320-72888-29 | PWS1119-OS-042221-100 | 74 | 72 | 76 | 97 | 71 | 70 | 75 | 69 |
| 320-72888-31 | PWS1173-OS-042221-100 | 114 | 108 | 79 | 91 | 57 | 68 | 71 | 76 |
| 320-72888-33 | PWS1030-OS-042321-100 | 95 | 106 | 116 | 85 | 84 | 84 | 70 | 73 |
| 320-72888-35 | PWS-FD01-042321 | 117 | 116 | 121 | 79 | 92 | 99 | 84 | 80 |
| 320-72888-36 | PWS1016-OS-042122-100 | 110 | 109 | 112 | 90 | 91 | 91 | 85 | 77 |
| 320-72888-36 MS | PWS-MS01-042321 | 100 | 94 | 103 | 88 | 93 | 85 | 78 | 80 |
| 320-72888-36 MSD | PWS-MSD01-042321 | 98 | 94 | 111 | 86 | 92 | 99 | 84 | 80 |
| 320-72888-38 | PWS1037-OS-042321-100 | 97 | 108 | 135 | 87 | 94 | 86 | 81 | 72 |
| 320-72888-40 | PWS1041-OS-042321-100 | 109 | 98 | 109 | 86 | 94 | 95 | 78 | 86 |
| 320-72888-42 | PWS1045-OS-042321-100 | 88 | 99 | 102 | 80 | 86 | 89 | 72 | 75 |
| 320-72888-44 | PWS1057-OS-042321-100 | 93 | 90 | 101 | 93 | 87 | 99 | 78 | 75 |
| 320-72888-46 | PWS1056-OS-042321-100 | 93 | 101 | 101 | 92 | 94 | 92 | 80 | 80 |
| 320-72888-48 | PWS1058-OS-042321-100 | 97 | 89 | 89 | 87 | 83 | 86 | 75 | 72 |
| 320-72888-50 | PWS1061-OS-042321-100 | 99 | 92 | 94 | 90 | 93 | 89 | 81 | 79 |
| 320-72888-52 | PWS1060-OS-042321-100 | 95 | 97 | 101 | 92 | 91 | 93 | 82 | 75 |
| 320-72888-54 | PWS1039-OS-042321-100 | 96 | 103 | 99 | 95 | 96 | 103 | 88 | 81 |
| 320-72888-56 | PWS1176-OS-042321-100 | 93 | 89 | 88 | 81 | 87 | 89 | 72 | 79 |
| 320-72888-58 | PWS1142-OS-042321-100 | 87 | 86 | 88 | 88 | 89 | 93 | 73 | 73 |
| 320-72888-60 | PWS-FD02-042321 | 89 | 90 | 91 | 84 | 83 | 88 | 73 | 73 |
| 320-72888-61 | PWS1137-OS-042321-100 | 101 | 87 | 90 | 89 | 88 | 89 | 73 | 67 |
| 320-72888-63 | PWS1131-OS-042321-100 | 96 | 87 | 85 | 86 | 86 | 86 | 76 | 74 |
| 320-72888-65 | PWS1126-OS-042321-100 | 107 | 97 | 100 | 91 | 90 | 92 | 78 | 74 |
| 320-72888-67 | PWS1123-OS-042321-100 | 92 | 103 | 94 | 89 | 95 | 89 | 79 | 76 |
| 320-72888-69 | PWS1117-OS-042321-100 | 102 | 88 | 103 | 84 | 80 | 79 | 72 | 71 |
| 320-72888-71 | PWS1107-OS-042321-100 | 81 | 92 | 96 | 95 | 76 | 78 | 73 | 72 |
| 320-72888-73 | PWS1062-OS-042421-100 | 81 | 92 | 101 | 83 | 77 | 77 | 75 | 63 |
| 320-72888-73 MS | PWS-MS01-042401 | 84 | 98 | 111 | 96 | 82 | 77 | 79 | 72 |
| 320-72888-73 MSD | PWS-MSD01-042401 | 76 | 93 | 96 | 98 | 84 | 80 | 77 | 73 |
| 320-72888-75 | PWS1064-OS-042421-100 | 84 | 99 | 125 | 94 | 95 | 93 | 80 | 84 |
| 320-72888-77 | PWS-FD01-042421 | 89 | 108 | 131 | 94 | 84 | 84 | 81 | 79 |
| 320-72888-78 | PWS1067-OS-042421-100 | 101 | 117 | 144 | 96 | 94 | 89 | 76 | 82 |
| 320-72888-80 | PWS1069-OS-042421-100 | 88 | 91 | 118 | 93 | 80 | 84 | 72 | 74 |
| 320-72888-82 | PWS1059-OS-042421-100 | 91 | 91 | 140 | 96 | 83 | 91 | 81 | 75 |
| 320-72888-84 | PWS1068-OS-042421-100 | 93 | 98 | 104 | 94 | 85 | 84 | 75 | 77 |
| 320-72888-86 | PWS1072-OS-042421-100 | 86 | 106 | 111 | 89 | 80 | 80 | 66 | 71 |
| 320-72888-88 | PWS1074-IS-042421-100 | 93 | 102 | 108 | 98 | 83 | 79 | 79 | 77 |
| 320-72888-90 | PWS1065-OS-042421-100 | 87 | 112 | 117 | 91 | 83 | 85 | 72 | 66 |
| 320-72888-92 | PWS1075-OS-042421-100 | 85 | 88 | 102 | 86 | 75 | 77 | 68 | 66 |
| 320-72888-94 | PWS1079-OS-042421-100 | 82 | 87 | 109 | 89 | 81 | 80 | 66 | 74 |
| 320-72888-96 | PWS1108-OS-042421-100 | 94 | 108 | 113 | 97 | 94 | 89 | 83 | 79 |
| 320-72888-98 | PWS1109-OS-042421-100 | 98 | 96 | 123 | 90 | 87 | 87 | 82 | 72 |
| 320-72888-98 MS | PWS-MS02-042421 | 93 | 87 | 116 | 100 | 85 | 88 | 75 | 77 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72888-98 MSD | PWS-MSD02-042421 | 98 | 102 | 119 | 90 | 88 | 86 | 80 | 80 |
| 320-72888-100 | PWS1159-OS-042421-100 | 102 | 125 | 127 | 98 | 95 | 110 | 86 | 92 |
| 320-72888-102 | PWS-FD02-042421 | 102 | 142 | 142 | 94 | 97 | 99 | 83 | 82 |
| 320-72888-103 | PWS1133-OS-042421-100 | 78 | 97 | 68 | 92 | 73 | 69 | 69 | 69 |
| 320-72888-105 | PWS1116-OS-042421-100 | 87 | 100 | 78 | 100 | 73 | 72 | 71 | 67 |
| 320-72888-107 | PWS1175-OS-042421-100 | 89 | 97 | 71 | 91 | 68 | 66 | 65 | 66 |
| 320-72888-109 | PWS1143-OS-042421-100 | 76 | 91 | 69 | 92 | 63 | 62 | 63 | 60 |
| 320-72888-111 | PWS1162-OS-042421-100 | 84 | 84 | 66 | 83 | 64 | 61 | 57 | 58 |
| 320-72888-113 | PWS1156-OS-042421-100 | 84 | 101 | 85 | 97 | 69 | 78 | 75 | 69 |
| 320-72888-115 | PWS1053-OS-042521-100 | 88 | 97 | 70 | 87 | 61 | 61 | 59 | 56 |
| 320-72888-115 MS | PWS-MS01-042521 | 94 | 79 | 63 | 101 | 61 | 56 | 65 | 60 |
| 320-72888-115 MSD | PWS-MSD01-042521 | 90 | 79 | 60 | 89 | 62 | 58 | 60 | 57 |
| 320-72888-117 | PWS1077-OS-042521-100 | 84 | 93 | 71 | 101 | 65 | 67 | 66 | 63 |
| 320-72888-119 | PWS-FD01-042521 | 96 | 96 | 74 | 95 | 67 | 66 | 66 | 62 |
| 320-72888-120 | PWS1083-OS-042521-100 | 75 | 61 | 66 | 94 | 52 | 60 | 67 | 64 |
| 320-72888-122 | PWS1046-OS-042521-100 | 103 | 98 | 70 | 97 | 67 | 67 | 74 | 63 |
| 320-72888-124 | PWS1081-OS-042521-100 | 70 | 64 | 69 | 97 | 52 | 53 | 73 | 70 |
| 320-72888-126 | PWS1029-OS-042521-100 | 93 | 71 | 62 | 95 | 52 | 51 | 60 | 52 |
| 320-72888-130 | PWS1144-OS-042521-100 | 67 | 71 | 65 | 93 | 63 | 65 | 62 | 61 |
| 320-72888-132 | PWS1165-OS-042521-100 | 79 | 69 | 80 | 110 | 57 | 63 | 73 | 72 |
| 320-72888-134 | PWS-FD02-042521 | 91 | 108 | 76 | 96 | 71 | 69 | 70 | 66 |
| 320-72888-137 | PWS1078-OS-042521-100 | 78 | 87 | 66 | 98 | 72 | 70 | 69 | 61 |
| LCS 320-485143/2-A | Lab Control Sample | 101 | 106 | 97 | 94 | 89 | 87 | 83 | 86 |
| LCS 320-485144/2-A | Lab Control Sample | 102 | 87 | 96 | 104 | 104 | 96 | 84 | 82 |
| LCS 320-485554/2-A | Lab Control Sample | 86 | 101 | 116 | 95 | 87 | 82 | 74 | 79 |
| LCS 320-485555/2-A | Lab Control Sample | 87 | 110 | 83 | 88 | 75 | 70 | 67 | 68 |
| LCS 320-485957/2-A | Lab Control Sample | 88 | 100 | 83 | 93 | 77 | 69 | 68 | 73 |
| LCSD 320-485144/3-A | Lab Control Sample Dup | 87 | 82 | 74 | 86 | 82 | 75 | 67 | 67 |
| MB 320-485143/1-A | Method Blank | 105 | 103 | 99 | 87 | 95 | 88 | 83 | 82 |
| MB 320-485144/1-A | Method Blank | 100 | 92 | 90 | 88 | 95 | 95 | 83 | 78 |
| MB 320-485554/1-A | Method Blank | 78 | 86 | 104 | 78 | 68 | 69 | 66 | 66 |
| MB 320-485555/1-A | Method Blank | 89 | 70 | 87 | 101 | 70 | 68 | 81 | 74 |
| MB 320-485957/1-A | Method Blank | 87 | 105 | 88 | 92 | 70 | 74 | 67 | 72 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | |
| 320-72888-1 | PWS1049-OS-042122-100 | 114 | 100 | | | | | | |
| 320-72888-3 | PWS-FD01-042221 | 101 | 91 | | | | | | |
| 320-72888-4 | PWS1051-OS-042221-100 | 93 | 93 | | | | | | |
| 320-72888-6 | PWS1047-OS-042221-100 | 69 | 69 | | | | | | |
| 320-72888-8 | PWS1055-OS-042221-100 | 89 | 86 | | | | | | |
| 320-72888-10 | PWS1054-OS-042221-100 | 92 | 86 | | | | | | |
| 320-72888-12 | PWS1048-OS-042221-100 | 87 | 83 | | | | | | |
| 320-72888-14 | PWS1152-OS-042221-100 | 67 | 68 | | | | | | |
| 320-72888-16 | PWS-FD02-042221 | 94 | 91 | | | | | | |
| 320-72888-17 | PWS1151-OS-042221-100 | 80 | 80 | | | | | | |
| 320-72888-17 MS | PWS-MS02-042221 | 79 | 70 | | | | | | |
| 320-72888-17 MSD | PWS-MSD02-042221 | 94 | 92 | | | | | | |
| 320-72888-19 | PWS1139-OS-042221-100 | 81 | 87 | | | | | | |
| 320-72888-21 | PWS1146-OS-042221-100 | 92 | 81 | | | | | | |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| 320-72888-23 | PWS1138-OS-042221-100 | 93 | 92 | | | | | | | | |
| 320-72888-25 | PWS1120-OS-042221-100 | 79 | 75 | | | | | | | | |
| 320-72888-27 | PWS1122-OS-042221-100 | 85 | 78 | | | | | | | | |
| 320-72888-29 | PWS1119-OS-042221-100 | 78 | 83 | | | | | | | | |
| 320-72888-31 | PWS1173-OS-042221-100 | 96 | 94 | | | | | | | | |
| 320-72888-33 | PWS1030-OS-042321-100 | 86 | 85 | | | | | | | | |
| 320-72888-35 | PWS-FD01-042321 | 83 | 85 | | | | | | | | |
| 320-72888-36 | PWS1016-OS-042122-100 | 90 | 82 | | | | | | | | |
| 320-72888-36 MS | PWS-MS01-042321 | 91 | 87 | | | | | | | | |
| 320-72888-36 MSD | PWS-MSD01-042321 | 93 | 88 | | | | | | | | |
| 320-72888-38 | PWS1037-OS-042321-100 | 84 | 75 | | | | | | | | |
| 320-72888-40 | PWS1041-OS-042321-100 | 98 | 81 | | | | | | | | |
| 320-72888-42 | PWS1045-OS-042321-100 | 79 | 77 | | | | | | | | |
| 320-72888-44 | PWS1057-OS-042321-100 | 87 | 89 | | | | | | | | |
| 320-72888-46 | PWS1056-OS-042321-100 | 85 | 86 | | | | | | | | |
| 320-72888-48 | PWS1058-OS-042321-100 | 80 | 83 | | | | | | | | |
| 320-72888-50 | PWS1061-OS-042321-100 | 79 | 83 | | | | | | | | |
| 320-72888-52 | PWS1060-OS-042321-100 | 94 | 90 | | | | | | | | |
| 320-72888-54 | PWS1039-OS-042321-100 | 88 | 96 | | | | | | | | |
| 320-72888-56 | PWS1176-OS-042321-100 | 83 | 81 | | | | | | | | |
| 320-72888-58 | PWS1142-OS-042321-100 | 84 | 84 | | | | | | | | |
| 320-72888-60 | PWS-FD02-042321 | 82 | 83 | | | | | | | | |
| 320-72888-61 | PWS1137-OS-042321-100 | 78 | 75 | | | | | | | | |
| 320-72888-63 | PWS1131-OS-042321-100 | 78 | 80 | | | | | | | | |
| 320-72888-65 | PWS1126-OS-042321-100 | 84 | 91 | | | | | | | | |
| 320-72888-67 | PWS1123-OS-042321-100 | 86 | 86 | | | | | | | | |
| 320-72888-69 | PWS1117-OS-042321-100 | 78 | 66 | | | | | | | | |
| 320-72888-71 | PWS1107-OS-042321-100 | 80 | 70 | | | | | | | | |
| 320-72888-73 | PWS1062-OS-042421-100 | 79 | 77 | | | | | | | | |
| 320-72888-73 MS | PWS-MS01-042401 | 82 | 76 | | | | | | | | |
| 320-72888-73 MSD | PWS-MSD01-042401 | 78 | 80 | | | | | | | | |
| 320-72888-75 | PWS1064-OS-042421-100 | 104 | 90 | | | | | | | | |
| 320-72888-77 | PWS-FD01-042421 | 88 | 83 | | | | | | | | |
| 320-72888-78 | PWS1067-OS-042421-100 | 88 | 86 | | | | | | | | |
| 320-72888-80 | PWS1069-OS-042421-100 | 78 | 76 | | | | | | | | |
| 320-72888-82 | PWS1059-OS-042421-100 | 80 | 84 | | | | | | | | |
| 320-72888-84 | PWS1068-OS-042421-100 | 85 | 78 | | | | | | | | |
| 320-72888-86 | PWS1072-OS-042421-100 | 87 | 77 | | | | | | | | |
| 320-72888-88 | PWS1074-IS-042421-100 | 85 | 77 | | | | | | | | |
| 320-72888-90 | PWS1065-OS-042421-100 | 76 | 82 | | | | | | | | |
| 320-72888-92 | PWS1075-OS-042421-100 | 74 | 78 | | | | | | | | |
| 320-72888-94 | PWS1079-OS-042421-100 | 77 | 82 | | | | | | | | |
| 320-72888-96 | PWS1108-OS-042421-100 | 77 | 91 | | | | | | | | |
| 320-72888-98 | PWS1109-OS-042421-100 | 70 | 82 | | | | | | | | |
| 320-72888-98 MS | PWS-MS02-042421 | 78 | 78 | | | | | | | | |
| 320-72888-98 MSD | PWS-MSD02-042421 | 90 | 87 | | | | | | | | |
| 320-72888-100 | PWS1159-OS-042421-100 | 99 | 98 | | | | | | | | |
| 320-72888-102 | PWS-FD02-042421 | 79 | 81 | | | | | | | | |
| 320-72888-103 | PWS1133-OS-042421-100 | 89 | 87 | | | | | | | | |
| 320-72888-105 | PWS1116-OS-042421-100 | 93 | 90 | | | | | | | | |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| 320-72888-107 | PWS1175-OS-042421-100 | 92 | 86 | | | | | | | | |
| 320-72888-109 | PWS1143-OS-042421-100 | 87 | 75 | | | | | | | | |
| 320-72888-111 | PWS1162-OS-042421-100 | 76 | 75 | | | | | | | | |
| 320-72888-113 | PWS1156-OS-042421-100 | 99 | 89 | | | | | | | | |
| 320-72888-115 | PWS1053-OS-042521-100 | 77 | 76 | | | | | | | | |
| 320-72888-115 MS | PWS-MS01-042521 | 75 | 74 | | | | | | | | |
| 320-72888-115 MSD | PWS-MSD01-042521 | 84 | 82 | | | | | | | | |
| 320-72888-117 | PWS1077-OS-042521-100 | 84 | 87 | | | | | | | | |
| 320-72888-119 | PWS-FD01-042521 | 100 | 94 | | | | | | | | |
| 320-72888-120 | PWS1083-OS-042521-100 | 76 | 66 | | | | | | | | |
| 320-72888-122 | PWS1046-OS-042521-100 | 86 | 81 | | | | | | | | |
| 320-72888-124 | PWS1081-OS-042521-100 | 80 | 66 | | | | | | | | |
| 320-72888-126 | PWS1029-OS-042521-100 | 54 | 55 | | | | | | | | |
| 320-72888-130 | PWS1144-OS-042521-100 | 88 | 86 | | | | | | | | |
| 320-72888-132 | PWS1165-OS-042521-100 | 81 | 75 | | | | | | | | |
| 320-72888-134 | PWS-FD02-042521 | 96 | 90 | | | | | | | | |
| 320-72888-137 | PWS1078-OS-042521-100 | 93 | 92 | | | | | | | | |
| LCS 320-485143/2-A | Lab Control Sample | 90 | 81 | | | | | | | | |
| LCS 320-485144/2-A | Lab Control Sample | 94 | 91 | | | | | | | | |
| LCS 320-485554/2-A | Lab Control Sample | 87 | 76 | | | | | | | | |
| LCS 320-485555/2-A | Lab Control Sample | 100 | 87 | | | | | | | | |
| LCS 320-485957/2-A | Lab Control Sample | 106 | 102 | | | | | | | | |
| LCSD 320-485144/3-A | Lab Control Sample Dup | 72 | 78 | | | | | | | | |
| MB 320-485143/1-A | Method Blank | 85 | 84 | | | | | | | | |
| MB 320-485144/1-A | Method Blank | 86 | 90 | | | | | | | | |
| MB 320-485554/1-A | Method Blank | 75 | 64 | | | | | | | | |
| MB 320-485555/1-A | Method Blank | 82 | 82 | | | | | | | | |
| MB 320-485957/1-A | Method Blank | 99 | 98 | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-485143/1-A**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/03/21 04:20 | 05/05/21 21:30 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/03/21 04:20* | *05/05/21 21:30* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485143/1-A**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 89 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C2 PFDoA | 103 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C2 PFTeDA | 98 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C2 PFHxDA | 91 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 18O2 PFHxS | 90 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| M2-4:2 FTS | 99 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| M2-6:2 FTS | 105 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C2 10:2 FTS | 99 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| 13C3 HFPO-DA | 87 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d3-NMeFOSAA | 95 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d5-NEtFOSAA | 88 | | 25 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d-N-MeFOSA-M | 83 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d-N-EtFOSA-M | 82 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 05/03/21 04:20 | 05/05/21 21:30 | 1 |

**Lab Sample ID: LCS 320-485143/2-A**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 47.6 | | ng/L | | 119 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 41.4 | | ng/L | | 103 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 43.0 | | ng/L | | 108 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 44.0 | | ng/L | | 110 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 39.9 | | ng/L | | 113 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 42.9 | | ng/L | | 114 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 38.9 | | ng/L | | 107 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485143/2-A**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 43.9 | | ng/L | | 115 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 41.2 | | ng/L | | 111 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.8 | | ng/L | | 98 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 42.2 | | ng/L | | 109 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 39.7 | | ng/L | | 103 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 |
| NMeFOSA | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| NEtFOSA | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 |
| NMeFOSAA | 40.0 | 45.1 | | ng/L | | 113 | 60 - 135 |
| NEtFOSAA | 40.0 | 47.7 | | ng/L | | 119 | 60 - 135 |
| NMeFOSE | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| NEtFOSE | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| 4:2 FTS | 37.4 | 42.4 | | ng/L | | 113 | 60 - 135 |
| 6:2 FTS | 37.9 | 43.2 | | ng/L | | 114 | 60 - 135 |
| 8:2 FTS | 38.3 | 46.5 | | ng/L | | 121 | 60 - 135 |
| 10:2 FTS | 38.6 | 44.0 | | ng/L | | 114 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 45.6 | | ng/L | | 114 | 60 - 135 |
| F-53B Major | 37.3 | 40.5 | | ng/L | | 109 | 60 - 135 |
| F-53B Minor | 37.7 | 39.7 | | ng/L | | 105 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 44.4 | | ng/L | | 118 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* |
| *13C5 PFPeA* | *93* | | *25 - 150* |
| *13C2 PFHxA* | *96* | | *25 - 150* |
| *13C4 PFHpA* | *91* | | *25 - 150* |
| *13C4 PFOA* | *94* | | *25 - 150* |
| *13C5 PFNA* | *95* | | *25 - 150* |
| *13C2 PFDA* | *100* | | *25 - 150* |
| *13C2 PFUnA* | *97* | | *25 - 150* |
| *13C2 PFDoA* | *96* | | *25 - 150* |
| *13C2 PFTeDA* | *100* | | *25 - 150* |
| *13C2 PFHxDA* | *95* | | *25 - 150* |
| *13C3 PFBS* | *91* | | *25 - 150* |
| *18O2 PFHxS* | *96* | | *25 - 150* |
| *13C4 PFOS* | *90* | | *25 - 150* |
| *13C8 FOSA* | *95* | | *10 - 150* |
| *M2-4:2 FTS* | *107* | | *25 - 150* |
| *M2-6:2 FTS* | *101* | | *25 - 150* |
| *M2-8:2 FTS* | *106* | | *25 - 150* |
| *13C2 10:2 FTS* | *97* | | *25 - 150* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485143/2-A**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *87* | | *25 - 150* |
| *d-N-MeFOSA-M* | *83* | | *10 - 150* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *90* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* |

**Lab Sample ID: 320-72888-36 MS**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: PWS-MS01-042321**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 35 | | 38.0 | 77.9 | | ng/L | | 113 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 6.4 | | 38.0 | 51.9 | | ng/L | | 120 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 5.3 | | 38.0 | 46.6 | | ng/L | | 109 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 2.9 | | 38.0 | 49.0 | | ng/L | | 121 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 14 | | 38.0 | 59.1 | | ng/L | | 119 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 38.0 | 41.4 | | ng/L | | 109 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 38.0 | 42.6 | | ng/L | | 112 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 38.0 | 41.2 | | ng/L | | 108 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 38.0 | 43.0 | | ng/L | | 113 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 38.0 | 40.0 | | ng/L | | 105 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 38.0 | 38.7 | | ng/L | | 102 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 38.0 | 43.2 | | ng/L | | 114 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 38.0 | 42.4 | | ng/L | | 112 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 6.3 | | 33.6 | 44.1 | | ng/L | | 112 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.93 | J | 35.6 | 44.8 | | ng/L | | 123 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 11 | | 34.6 | 51.5 | | ng/L | | 117 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.71 | J | 36.2 | 41.9 | | ng/L | | 114 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 9.9 | | 35.3 | 48.7 | | ng/L | | 110 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 36.5 | 32.9 | | ng/L | | 90 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 36.6 | 40.3 | | ng/L | | 110 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.8 | 40.3 | | ng/L | | 110 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 38.0 | 49.8 | | ng/L | | 125 | 70 - 130 |
| NMeFOSA | ND | | 38.0 | 43.8 | | ng/L | | 115 | 70 - 130 |
| NEtFOSA | ND | | 38.0 | 38.0 | | ng/L | | 100 | 70 - 130 |
| NMeFOSAA | ND | | 38.0 | 42.5 | | ng/L | | 112 | 70 - 130 |
| NEtFOSAA | ND | | 38.0 | 47.7 | | ng/L | | 125 | 70 - 130 |
| NMeFOSE | ND | | 38.0 | 39.3 | | ng/L | | 104 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-36 MS**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: PWS-MS01-042321**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 38.0 | 40.6 | | ng/L | | 107 | 70 - 130 |
| 4:2 FTS | ND | | 35.5 | 43.9 | | ng/L | | 124 | 70 - 130 |
| 6:2 FTS | ND | | 36.0 | 43.8 | | ng/L | | 122 | 70 - 130 |
| 8:2 FTS | ND | F1 | 36.4 | 46.1 | | ng/L | | 127 | 70 - 130 |
| 10:2 FTS | ND | | 36.6 | 37.2 | | ng/L | | 102 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 38.0 | 44.0 | | ng/L | | 116 | 70 - 130 |
| F-53B Major | ND | | 35.4 | 40.3 | | ng/L | | 114 | 70 - 130 |
| F-53B Minor | ND | | 35.8 | 41.7 | | ng/L | | 117 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.8 | 38.1 | | ng/L | | 106 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* |
| *13C5 PFPeA* | *81* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *89* | | *25 - 150* |
| *13C4 PFOA* | *95* | | *25 - 150* |
| *13C5 PFNA* | *102* | | *25 - 150* |
| *13C2 PFDA* | *103* | | *25 - 150* |
| *13C2 PFUnA* | *101* | | *25 - 150* |
| *13C2 PFDoA* | *102* | | *25 - 150* |
| *13C2 PFTeDA* | *104* | | *25 - 150* |
| *13C2 PFHxDA* | *109* | | *25 - 150* |
| *13C3 PFBS* | *83* | | *25 - 150* |
| *18O2 PFHxS* | *92* | | *25 - 150* |
| *13C4 PFOS* | *96* | | *25 - 150* |
| *13C8 FOSA* | *101* | | *10 - 150* |
| *M2-4:2 FTS* | *92* | | *25 - 150* |
| *M2-6:2 FTS* | *100* | | *25 - 150* |
| *M2-8:2 FTS* | *94* | | *25 - 150* |
| *13C2 10:2 FTS* | *103* | | *25 - 150* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *91* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* |

**Lab Sample ID: 320-72888-36 MSD**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: PWS-MSD01-042321**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 35 | | 36.2 | 77.2 | | ng/L | | 116 | 70 - 130 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | 6.4 | | 36.2 | 47.6 | | ng/L | | 114 | 70 - 130 | 9 | 30 |
| Perfluorohexanoic acid (PFHxA) | 5.3 | | 36.2 | 42.6 | | ng/L | | 103 | 70 - 130 | 9 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 2.9 | | 36.2 | 44.1 | | ng/L | | 114 | 70 - 130 | 11 | 30 |
| Perfluorooctanoic acid (PFOA) | 14 | | 36.2 | 51.9 | | ng/L | | 105 | 70 - 130 | 13 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-36 MSD**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: PWS-MSD01-042321**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 36.2 | 40.4 | | ng/L | | 112 | 70 - 130 | 3 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.2 | 39.3 | | ng/L | | 109 | 70 - 130 | 8 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.2 | 41.4 | | ng/L | | 115 | 70 - 130 | 1 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.2 | 38.4 | | ng/L | | 106 | 70 - 130 | 11 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.2 | 39.7 | | ng/L | | 110 | 70 - 130 | 1 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.2 | 38.2 | | ng/L | | 106 | 70 - 130 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.2 | 40.0 | | ng/L | | 111 | 70 - 130 | 8 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.2 | 42.9 | | ng/L | | 119 | 70 - 130 | 1 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 6.3 | | 32.0 | 40.3 | | ng/L | | 106 | 70 - 130 | 9 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.93 | J | 33.9 | 38.8 | | ng/L | | 112 | 70 - 130 | 14 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 11 | | 32.9 | 47.3 | | ng/L | | 110 | 70 - 130 | 8 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.71 | J | 34.4 | 42.0 | | ng/L | | 120 | 70 - 130 | 0 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 9.9 | | 33.6 | 47.5 | | ng/L | | 112 | 70 - 130 | 3 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 34.7 | 33.8 | | ng/L | | 97 | 70 - 130 | 3 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 34.9 | 37.6 | | ng/L | | 108 | 70 - 130 | 7 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.0 | 37.3 | | ng/L | | 107 | 70 - 130 | 8 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 36.2 | 45.5 | | ng/L | | 119 | 70 - 130 | 9 | 30 |
| NMeFOSA | ND | | 36.2 | 39.7 | | ng/L | | 110 | 70 - 130 | 10 | 30 |
| NEtFOSA | ND | | 36.2 | 35.9 | | ng/L | | 99 | 70 - 130 | 6 | 30 |
| NMeFOSAA | ND | | 36.2 | 42.7 | | ng/L | | 118 | 70 - 130 | 0 | 30 |
| NEtFOSAA | ND | | 36.2 | 38.6 | | ng/L | | 107 | 70 - 130 | 21 | 30 |
| NMeFOSE | ND | | 36.2 | 32.7 | | ng/L | | 90 | 70 - 130 | 18 | 30 |
| NEtFOSE | ND | | 36.2 | 37.5 | | ng/L | | 104 | 70 - 130 | 8 | 30 |
| 4:2 FTS | ND | | 33.8 | 35.6 | | ng/L | | 105 | 70 - 130 | 21 | 30 |
| 6:2 FTS | ND | | 34.3 | 38.9 | | ng/L | | 113 | 70 - 130 | 12 | 30 |
| 8:2 FTS | ND | F1 | 34.7 | 45.5 | F1 | ng/L | | 131 | 70 - 130 | 1 | 30 |
| 10:2 FTS | ND | | 34.9 | 33.1 | | ng/L | | 95 | 70 - 130 | 12 | 30 |
| HFPO-DA (GenX) | ND | | 36.2 | 42.0 | | ng/L | | 116 | 70 - 130 | 5 | 30 |
| F-53B Major | ND | | 33.7 | 37.9 | | ng/L | | 112 | 70 - 130 | 6 | 30 |
| F-53B Minor | ND | | 34.1 | 38.8 | | ng/L | | 114 | 70 - 130 | 7 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.1 | 35.8 | | ng/L | | 105 | 70 - 130 | 6 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* |
| *13C5 PFPeA* | *85* | | *25 - 150* |
| *13C2 PFHxA* | *88* | | *25 - 150* |
| *13C4 PFHpA* | *89* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-36 MSD**
**Matrix: Water**
**Analysis Batch: 486210**

**Client Sample ID: PWS-MSD01-042321**
**Prep Type: Total/NA**
**Prep Batch: 485143**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C4 PFOA | 97 | | 25 - 150 |
| 13C5 PFNA | 101 | | 25 - 150 |
| 13C2 PFDA | 94 | | 25 - 150 |
| 13C2 PFUnA | 101 | | 25 - 150 |
| 13C2 PFDoA | 98 | | 25 - 150 |
| 13C2 PFTeDA | 100 | | 25 - 150 |
| 13C2 PFHxDA | 101 | | 25 - 150 |
| 13C3 PFBS | 86 | | 25 - 150 |
| 18O2 PFHxS | 91 | | 25 - 150 |
| 13C4 PFOS | 95 | | 25 - 150 |
| 13C8 FOSA | 98 | | 10 - 150 |
| M2-4:2 FTS | 97 | | 25 - 150 |
| M2-6:2 FTS | 98 | | 25 - 150 |
| M2-8:2 FTS | 94 | | 25 - 150 |
| 13C2 10:2 FTS | 111 | | 25 - 150 |
| 13C3 HFPO-DA | 86 | | 25 - 150 |
| d3-NMeFOSAA | 92 | | 25 - 150 |
| d5-NEtFOSAA | 99 | | 25 - 150 |
| d-N-MeFOSA-M | 84 | | 10 - 150 |
| d-N-EtFOSA-M | 80 | | 10 - 150 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 |
| d9-N-EtFOSE-M | 88 | | 10 - 150 |

**Lab Sample ID: MB 320-485144/1-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485144/1-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/03/21 04:32 | 05/05/21 09:00 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C5 PFNA* | *89* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 PFHxDA* | *77* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C3 PFBS* | *83* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C2 10:2 FTS* | *90* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d3-NMeFOSAA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d5-NEtFOSAA* | *95* | | *25 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d-N-MeFOSA-M* | *83* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d-N-EtFOSA-M* | *78* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/03/21 04:32* | *05/05/21 09:00* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485144/2-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 43.4 | | ng/L | | 109 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 37.8 | | ng/L | | 94 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.6 | | ng/L | | 101 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 34.7 | | ng/L | | 98 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 41.9 | | ng/L | | 112 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 38.6 | | ng/L | | 106 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 43.0 | | ng/L | | 113 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 40.4 | | ng/L | | 109 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.4 | | ng/L | | 97 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 39.2 | | ng/L | | 102 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.6 | | ng/L | | 105 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 |
| NMeFOSA | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 |
| NEtFOSA | 40.0 | 45.7 | | ng/L | | 114 | 60 - 135 |
| NMeFOSAA | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| NEtFOSAA | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 |
| NMeFOSE | 40.0 | 39.8 | | ng/L | | 100 | 60 - 135 |
| NEtFOSE | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| 4:2 FTS | 37.4 | 40.4 | | ng/L | | 108 | 60 - 135 |
| 6:2 FTS | 37.9 | 44.7 | | ng/L | | 118 | 60 - 135 |
| 8:2 FTS | 38.3 | 44.7 | | ng/L | | 117 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.5 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 |
| F-53B Major | 37.3 | 44.4 | | ng/L | | 119 | 60 - 135 |
| F-53B Minor | 37.7 | 40.8 | | ng/L | | 108 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 43.2 | | ng/L | | 115 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 106 | | 25 - 150 |
| 13C5 PFPeA | 98 | | 25 - 150 |
| 13C2 PFHxA | 113 | | 25 - 150 |
| 13C4 PFHpA | 100 | | 25 - 150 |
| 13C4 PFOA | 102 | | 25 - 150 |
| 13C5 PFNA | 99 | | 25 - 150 |
| 13C2 PFDA | 97 | | 25 - 150 |
| 13C2 PFUnA | 104 | | 25 - 150 |
| 13C2 PFDoA | 99 | | 25 - 150 |
| 13C2 PFTeDA | 101 | | 25 - 150 |
| 13C2 PFHxDA | 90 | | 25 - 150 |
| 13C3 PFBS | 99 | | 25 - 150 |
| 18O2 PFHxS | 98 | | 25 - 150 |
| 13C4 PFOS | 95 | | 25 - 150 |
| 13C8 FOSA | 101 | | 10 - 150 |
| M2-4:2 FTS | 78 | | 25 - 150 |
| M2-6:2 FTS | 102 | | 25 - 150 |
| M2-8:2 FTS | 87 | | 25 - 150 |
| 13C2 10:2 FTS | 96 | | 25 - 150 |
| 13C3 HFPO-DA | 104 | | 25 - 150 |
| d3-NMeFOSAA | 104 | | 25 - 150 |
| d5-NEtFOSAA | 96 | | 25 - 150 |
| d-N-MeFOSA-M | 84 | | 10 - 150 |
| d-N-EtFOSA-M | 82 | | 10 - 150 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 |
| d9-N-EtFOSE-M | 91 | | 10 - 150 |

**Lab Sample ID: LCSD 320-485144/3-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 46.9 | | ng/L | | 117 | 60 - 135 | 10 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 | 1 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 | 10 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 48.7 | | ng/L | | 122 | 60 - 135 | 11 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 46.6 | | ng/L | | 116 | 60 - 135 | 1 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 48.2 | | ng/L | | 120 | 60 - 135 | 8 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 47.1 | | ng/L | | 118 | 60 - 135 | 12 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 49.0 | | ng/L | | 122 | 60 - 135 | 19 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 44.8 | | ng/L | | 112 | 60 - 135 | 7 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 | 4 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 49.4 | | ng/L | | 124 | 60 - 135 | 18 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 46.6 | | ng/L | | 117 | 60 - 135 | 3 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 41.8 | | ng/L | | 118 | 60 - 135 | 19 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-485144/3-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 49.6 | | ng/L | | 132 | 60 - 135 | 17 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 40.3 | | ng/L | | 111 | 60 - 135 | 4 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 46.1 | | ng/L | | 121 | 60 - 135 | 7 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 41.4 | | ng/L | | 111 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 43.4 | | ng/L | | 113 | 60 - 135 | 15 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 42.6 | | ng/L | | 111 | 60 - 135 | 8 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 40.7 | | ng/L | | 105 | 60 - 135 | 0 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 47.8 | | ng/L | | 119 | 60 - 135 | 14 | 30 |
| NMeFOSA | | | 40.0 | 48.6 | | ng/L | | 122 | 60 - 135 | 11 | 30 |
| NEtFOSA | | | 40.0 | 47.1 | | ng/L | | 118 | 60 - 135 | 3 | 30 |
| NMeFOSAA | | | 40.0 | 47.7 | | ng/L | | 119 | 60 - 135 | 11 | 30 |
| NEtFOSAA | | | 40.0 | 50.2 | | ng/L | | 125 | 60 - 135 | 8 | 30 |
| NMeFOSE | | | 40.0 | 47.8 | | ng/L | | 119 | 60 - 135 | 18 | 30 |
| NEtFOSE | | | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 | 4 | 30 |
| 4:2 FTS | | | 37.4 | 48.6 | | ng/L | | 130 | 60 - 135 | 19 | 30 |
| 6:2 FTS | | | 37.9 | 45.1 | | ng/L | | 119 | 60 - 135 | 1 | 30 |
| 8:2 FTS | | | 38.3 | 46.5 | | ng/L | | 121 | 60 - 135 | 4 | 30 |
| 10:2 FTS | | | 38.6 | 41.1 | | ng/L | | 107 | 60 - 135 | 12 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 | 12 | 30 |
| F-53B Major | | | 37.3 | 48.8 | | ng/L | | 131 | 60 - 135 | 10 | 30 |
| F-53B Minor | | | 37.7 | 43.3 | | ng/L | | 115 | 60 - 135 | 6 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 46.9 | | ng/L | | 124 | 60 - 135 | 8 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* |
| *13C5 PFPeA* | *88* | | *25 - 150* |
| *13C2 PFHxA* | *91* | | *25 - 150* |
| *13C4 PFHpA* | *80* | | *25 - 150* |
| *13C4 PFOA* | *87* | | *25 - 150* |
| *13C5 PFNA* | *84* | | *25 - 150* |
| *13C2 PFDA* | *77* | | *25 - 150* |
| *13C2 PFUnA* | *78* | | *25 - 150* |
| *13C2 PFDoA* | *86* | | *25 - 150* |
| *13C2 PFTeDA* | *77* | | *25 - 150* |
| *13C2 PFHxDA* | *78* | | *25 - 150* |
| *13C3 PFBS* | *77* | | *25 - 150* |
| *18O2 PFHxS* | *79* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *82* | | *10 - 150* |
| *M2-4:2 FTS* | *68* | | *25 - 150* |
| *M2-6:2 FTS* | *87* | | *25 - 150* |
| *M2-8:2 FTS* | *82* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-485144/3-A**
**Matrix: Water**
**Analysis Batch: 486017**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485144**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 74 | | 25 - 150 |
| 13C3 HFPO-DA | 86 | | 25 - 150 |
| d3-NMeFOSAA | 82 | | 25 - 150 |
| d5-NEtFOSAA | 75 | | 25 - 150 |
| d-N-MeFOSA-M | 67 | | 10 - 150 |
| d-N-EtFOSA-M | 67 | | 10 - 150 |
| d7-N-MeFOSE-M | 72 | | 10 - 150 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 |

**Lab Sample ID: MB 320-485554/1-A**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485554/1-A**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/03/21 19:37 | 05/04/21 19:22 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C4 PFHpA* | *76* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C4 PFOA* | *75* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C5 PFNA* | *76* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFDA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFUnA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFDoA* | *77* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFTeDA* | *71* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 PFHxDA* | *70* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C3 PFBS* | *70* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *18O2 PFHxS* | *69* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C4 PFOS* | *71* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C8 FOSA* | *71* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *M2-4:2 FTS* | *79* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *M2-6:2 FTS* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *M2-8:2 FTS* | *86* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *13C3 HFPO-DA* | *78* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d3-NMeFOSAA* | *68* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d5-NEtFOSAA* | *69* | | *25 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |
| *d9-N-EtFOSE-M* | *64* | | *10 - 150* | *05/03/21 19:37* | *05/04/21 19:22* | *1* |

**Lab Sample ID: LCS 320-485554/2-A**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 37.8 | | ng/L | | 94 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 39.4 | | ng/L | | 99 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 36.8 | | ng/L | | 92 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 34.2 | | ng/L | | 85 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 33.6 | | ng/L | | 84 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 33.6 | | ng/L | | 84 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485554/2-A**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorododecanoic acid (PFDoA) | 40.0 | 35.7 | | ng/L | | 89 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 34.4 | | ng/L | | 86 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 34.4 | | ng/L | | 86 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 38.3 | | ng/L | | 96 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 34.3 | | ng/L | | 86 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 32.3 | | ng/L | | 91 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 35.1 | | ng/L | | 94 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 33.3 | | ng/L | | 91 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 34.7 | | ng/L | | 91 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 33.5 | | ng/L | | 90 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 33.0 | | ng/L | | 86 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 37.7 | | ng/L | | 98 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 34.8 | | ng/L | | 90 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 33.7 | | ng/L | | 84 | 60 - 135 |
| NMeFOSA | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| NEtFOSA | 40.0 | 33.1 | | ng/L | | 83 | 60 - 135 |
| NMeFOSAA | 40.0 | 37.3 | | ng/L | | 93 | 60 - 135 |
| NEtFOSAA | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 |
| NMeFOSE | 40.0 | 32.8 | | ng/L | | 82 | 60 - 135 |
| NEtFOSE | 40.0 | 36.7 | | ng/L | | 92 | 60 - 135 |
| 4:2 FTS | 37.4 | 28.4 | | ng/L | | 76 | 60 - 135 |
| 6:2 FTS | 37.9 | 32.8 | | ng/L | | 87 | 60 - 135 |
| 8:2 FTS | 38.3 | 33.1 | | ng/L | | 86 | 60 - 135 |
| 10:2 FTS | 38.6 | 32.7 | | ng/L | | 85 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 36.2 | | ng/L | | 90 | 60 - 135 |
| F-53B Major | 37.3 | 36.5 | | ng/L | | 98 | 60 - 135 |
| F-53B Minor | 37.7 | 35.4 | | ng/L | | 94 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 36.8 | | ng/L | | 98 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* |
| *13C5 PFPeA* | *93* | | *25 - 150* |
| *13C2 PFHxA* | *93* | | *25 - 150* |
| *13C4 PFHpA* | *102* | | *25 - 150* |
| *13C4 PFOA* | *89* | | *25 - 150* |
| *13C5 PFNA* | *97* | | *25 - 150* |
| *13C2 PFDA* | *94* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485554/2-A**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C2 PFUnA | 93 | | 25 - 150 |
| 13C2 PFDoA | 94 | | 25 - 150 |
| 13C2 PFTeDA | 89 | | 25 - 150 |
| 13C2 PFHxDA | 85 | | 25 - 150 |
| 13C3 PFBS | 85 | | 25 - 150 |
| 18O2 PFHxS | 86 | | 25 - 150 |
| 13C4 PFOS | 83 | | 25 - 150 |
| 13C8 FOSA | 86 | | 10 - 150 |
| M2-4:2 FTS | 102 | | 25 - 150 |
| M2-6:2 FTS | 86 | | 25 - 150 |
| M2-8:2 FTS | 101 | | 25 - 150 |
| 13C2 10:2 FTS | 116 | | 25 - 150 |
| 13C3 HFPO-DA | 95 | | 25 - 150 |
| d3-NMeFOSAA | 87 | | 25 - 150 |
| d5-NEtFOSAA | 82 | | 25 - 150 |
| d-N-MeFOSA-M | 74 | | 10 - 150 |
| d-N-EtFOSA-M | 79 | | 10 - 150 |
| d7-N-MeFOSE-M | 87 | | 10 - 150 |
| d9-N-EtFOSE-M | 76 | | 10 - 150 |

**Lab Sample ID: 320-72888-73 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS01-042401**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 27 | | 33.6 | 56.8 | | ng/L | | 89 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 0.66 | J | 33.6 | 32.1 | | ng/L | | 94 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 33.6 | 29.7 | | ng/L | | 85 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 33.6 | 30.0 | | ng/L | | 89 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 4.5 | | 33.6 | 36.9 | | ng/L | | 97 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 33.6 | 29.9 | | ng/L | | 89 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 33.6 | 28.9 | | ng/L | | 86 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.6 | 27.2 | | ng/L | | 81 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.6 | 28.3 | | ng/L | | 84 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.6 | 29.1 | | ng/L | | 87 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.6 | 29.4 | | ng/L | | 88 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.6 | 30.6 | | ng/L | | 91 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.6 | 27.1 | | ng/L | | 81 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 29.7 | 30.2 | | ng/L | | 92 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.3 | J | 31.5 | 31.8 | | ng/L | | 97 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 5.3 | | 30.6 | 31.5 | | ng/L | | 86 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-73 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS01-042401**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 32.0 | 30.5 | | ng/L | | 96 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 31.2 | 31.3 | | ng/L | | 89 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 32.2 | 26.3 | | ng/L | | 82 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.4 | 26.0 | | ng/L | | 80 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.5 | 28.6 | | ng/L | | 88 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 3.4 | | 33.6 | 34.9 | | ng/L | | 94 | 70 - 130 |
| NMeFOSA | ND | | 33.6 | 29.6 | | ng/L | | 88 | 70 - 130 |
| NEtFOSA | ND | | 33.6 | 25.0 | | ng/L | | 74 | 70 - 130 |
| NMeFOSAA | ND | | 33.6 | 30.3 | | ng/L | | 90 | 70 - 130 |
| NEtFOSAA | ND | | 33.6 | 30.7 | | ng/L | | 91 | 70 - 130 |
| NMeFOSE | ND | | 33.6 | 26.4 | | ng/L | | 79 | 70 - 130 |
| NEtFOSE | ND | | 33.6 | 30.3 | | ng/L | | 90 | 70 - 130 |
| 4:2 FTS | ND | | 31.4 | 29.3 | | ng/L | | 93 | 70 - 130 |
| 6:2 FTS | ND | | 31.8 | 28.9 | | ng/L | | 91 | 70 - 130 |
| 8:2 FTS | ND | | 32.2 | 29.5 | | ng/L | | 92 | 70 - 130 |
| 10:2 FTS | ND | | 32.4 | 24.8 | | ng/L | | 77 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 33.6 | 31.9 | | ng/L | | 95 | 70 - 130 |
| F-53B Major | ND | | 31.3 | 31.3 | | ng/L | | 100 | 70 - 130 |
| F-53B Minor | ND | | 31.6 | 27.8 | | ng/L | | 88 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.6 | 27.9 | | ng/L | | 88 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* |
| *13C5 PFPeA* | *94* | | *25 - 150* |
| *13C2 PFHxA* | *96* | | *25 - 150* |
| *13C4 PFHpA* | *95* | | *25 - 150* |
| *13C4 PFOA* | *90* | | *25 - 150* |
| *13C5 PFNA* | *97* | | *25 - 150* |
| *13C2 PFDA* | *93* | | *25 - 150* |
| *13C2 PFUnA* | *92* | | *25 - 150* |
| *13C2 PFDoA* | *97* | | *25 - 150* |
| *13C2 PFTeDA* | *86* | | *25 - 150* |
| *13C2 PFHxDA* | *92* | | *25 - 150* |
| *13C3 PFBS* | *82* | | *25 - 150* |
| *18O2 PFHxS* | *91* | | *25 - 150* |
| *13C4 PFOS* | *86* | | *25 - 150* |
| *13C8 FOSA* | *86* | | *10 - 150* |
| *M2-4:2 FTS* | *77* | | *25 - 150* |
| *M2-6:2 FTS* | *84* | | *25 - 150* |
| *M2-8:2 FTS* | *98* | | *25 - 150* |
| *13C2 10:2 FTS* | *111* | | *25 - 150* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* |
| *d3-NMeFOSAA* | *82* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-73 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS01-042401**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *77* | | *25 - 150* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* |

**Lab Sample ID: 320-72888-73 MSD**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MSD01-042401**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 27 | | 33.9 | 55.5 | | ng/L | | 85 | 70 - 130 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | 0.66 | J | 33.9 | 30.5 | | ng/L | | 88 | 70 - 130 | 5 | 30 |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 33.9 | 26.9 | | ng/L | | 76 | 70 - 130 | 10 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 33.9 | 35.1 | | ng/L | | 104 | 70 - 130 | 16 | 30 |
| Perfluorooctanoic acid (PFOA) | 4.5 | | 33.9 | 34.7 | | ng/L | | 89 | 70 - 130 | 6 | 30 |
| Perfluorononanoic acid (PFNA) | ND | | 33.9 | 26.3 | | ng/L | | 78 | 70 - 130 | 13 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 33.9 | 30.0 | | ng/L | | 88 | 70 - 130 | 4 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.9 | 28.1 | | ng/L | | 83 | 70 - 130 | 3 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.9 | 28.1 | | ng/L | | 83 | 70 - 130 | 1 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.9 | 28.4 | | ng/L | | 84 | 70 - 130 | 3 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.9 | 27.0 | | ng/L | | 80 | 70 - 130 | 9 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.9 | 30.1 | | ng/L | | 89 | 70 - 130 | 2 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.9 | 30.7 | | ng/L | | 91 | 70 - 130 | 12 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 29.9 | 29.1 | | ng/L | | 87 | 70 - 130 | 4 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.3 | J | 31.8 | 29.4 | | ng/L | | 88 | 70 - 130 | 8 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 5.3 | | 30.8 | 35.2 | | ng/L | | 97 | 70 - 130 | 11 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 32.2 | 30.7 | | ng/L | | 95 | 70 - 130 | 0 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 31.4 | 29.8 | | ng/L | | 84 | 70 - 130 | 5 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 32.5 | 23.2 | | ng/L | | 71 | 70 - 130 | 12 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.6 | 27.1 | | ng/L | | 83 | 70 - 130 | 4 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.8 | 28.3 | | ng/L | | 86 | 70 - 130 | 1 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 3.4 | | 33.9 | 33.4 | | ng/L | | 88 | 70 - 130 | 4 | 30 |
| NMeFOSA | ND | | 33.9 | 28.8 | | ng/L | | 85 | 70 - 130 | 3 | 30 |
| NEtFOSA | ND | | 33.9 | 27.6 | | ng/L | | 82 | 70 - 130 | 10 | 30 |
| NMeFOSAA | ND | | 33.9 | 28.9 | | ng/L | | 85 | 70 - 130 | 5 | 30 |
| NEtFOSAA | ND | | 33.9 | 28.7 | | ng/L | | 85 | 70 - 130 | 7 | 30 |
| NMeFOSE | ND | | 33.9 | 30.5 | | ng/L | | 90 | 70 - 130 | 14 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-73 MSD**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MSD01-042401**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 33.9 | 25.9 | | ng/L | | 76 | 70 - 130 | 16 | 30 |
| 4:2 FTS | ND | | 31.6 | 27.3 | | ng/L | | 86 | 70 - 130 | 7 | 30 |
| 6:2 FTS | ND | | 32.1 | 31.8 | | ng/L | | 99 | 70 - 130 | 10 | 30 |
| 8:2 FTS | ND | | 32.4 | 28.1 | | ng/L | | 87 | 70 - 130 | 5 | 30 |
| 10:2 FTS | ND | | 32.6 | 31.0 | | ng/L | | 95 | 70 - 130 | 22 | 30 |
| HFPO-DA (GenX) | ND | | 33.9 | 28.6 | | ng/L | | 84 | 70 - 130 | 11 | 30 |
| F-53B Major | ND | | 31.6 | 29.5 | | ng/L | | 93 | 70 - 130 | 6 | 30 |
| F-53B Minor | ND | | 31.9 | 28.3 | | ng/L | | 89 | 70 - 130 | 2 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.9 | 28.7 | | ng/L | | 90 | 70 - 130 | 3 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* |
| *13C5 PFPeA* | *91* | | *25 - 150* |
| *13C2 PFHxA* | *96* | | *25 - 150* |
| *13C4 PFHpA* | *96* | | *25 - 150* |
| *13C4 PFOA* | *96* | | *25 - 150* |
| *13C5 PFNA* | *103* | | *25 - 150* |
| *13C2 PFDA* | *87* | | *25 - 150* |
| *13C2 PFUnA* | *92* | | *25 - 150* |
| *13C2 PFDoA* | *98* | | *25 - 150* |
| *13C2 PFTeDA* | *90* | | *25 - 150* |
| *13C2 PFHxDA* | *93* | | *25 - 150* |
| *13C3 PFBS* | *93* | | *25 - 150* |
| *18O2 PFHxS* | *87* | | *25 - 150* |
| *13C4 PFOS* | *86* | | *25 - 150* |
| *13C8 FOSA* | *94* | | *10 - 150* |
| *M2-4:2 FTS* | *83* | | *25 - 150* |
| *M2-6:2 FTS* | *76* | | *25 - 150* |
| *M2-8:2 FTS* | *93* | | *25 - 150* |
| *13C2 10:2 FTS* | *96* | | *25 - 150* |
| *13C3 HFPO-DA* | *98* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |
| *d5-NEtFOSAA* | *80* | | *25 - 150* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* |

**Lab Sample ID: 320-72888-98 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.1 | | 35.2 | 35.8 | | ng/L | | 87 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 4.4 | | 35.2 | 40.5 | | ng/L | | 103 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 3.1 | | 35.2 | 31.3 | | ng/L | | 80 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 1.4 | J | 35.2 | 37.4 | | ng/L | | 102 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 35.2 | 31.9 | | ng/L | | 87 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-98 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 35.2 | 29.3 | | ng/L | | 83 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 35.2 | 28.7 | | ng/L | | 82 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 35.2 | 30.5 | | ng/L | | 87 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 35.2 | 31.6 | | ng/L | | 90 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 35.2 | 32.3 | | ng/L | | 92 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 35.2 | 30.4 | | ng/L | | 86 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 35.2 | 30.8 | | ng/L | | 87 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 35.2 | 30.4 | | ng/L | | 86 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 0.35 | J | 31.1 | 28.8 | | ng/L | | 92 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 33.0 | 31.4 | | ng/L | | 95 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 0.83 | J | 32.0 | 29.9 | | ng/L | | 91 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 33.5 | 31.6 | | ng/L | | 94 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 0.62 | J | 32.7 | 27.1 | | ng/L | | 81 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 33.8 | 26.6 | | ng/L | | 79 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 33.9 | 29.8 | | ng/L | | 88 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 34.1 | 28.9 | | ng/L | | 85 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 0.97 | J | 35.2 | 31.9 | | ng/L | | 88 | 70 - 130 |
| NMeFOSA | ND | | 35.2 | 30.4 | | ng/L | | 86 | 70 - 130 |
| NEtFOSA | ND | | 35.2 | 28.9 | | ng/L | | 82 | 70 - 130 |
| NMeFOSAA | ND | | 35.2 | 31.0 | | ng/L | | 88 | 70 - 130 |
| NEtFOSAA | ND | | 35.2 | 29.0 | | ng/L | | 82 | 70 - 130 |
| NMeFOSE | ND | F1 | 35.2 | 31.2 | | ng/L | | 89 | 70 - 130 |
| NEtFOSE | ND | | 35.2 | 28.5 | | ng/L | | 81 | 70 - 130 |
| 4:2 FTS | ND | | 32.9 | 31.4 | | ng/L | | 95 | 70 - 130 |
| 6:2 FTS | ND | | 33.4 | 29.5 | | ng/L | | 88 | 70 - 130 |
| 8:2 FTS | ND | | 33.7 | 32.3 | | ng/L | | 96 | 70 - 130 |
| 10:2 FTS | ND | | 33.9 | 27.5 | | ng/L | | 81 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 35.2 | 32.9 | | ng/L | | 93 | 70 - 130 |
| F-53B Major | ND | | 32.8 | 28.4 | | ng/L | | 86 | 70 - 130 |
| F-53B Minor | ND | | 33.2 | 28.1 | | ng/L | | 85 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 33.2 | 29.7 | | ng/L | | 90 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* |
| *13C5 PFPeA* | *87* | | *25 - 150* |
| *13C2 PFHxA* | *103* | | *25 - 150* |
| *13C4 PFHpA* | *93* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-98 MS**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MS02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFOA | 99 | | 25 - 150 |
| 13C5 PFNA | 105 | | 25 - 150 |
| 13C2 PFDA | 98 | | 25 - 150 |
| 13C2 PFUnA | 97 | | 25 - 150 |
| 13C2 PFDoA | 92 | | 25 - 150 |
| 13C2 PFTeDA | 88 | | 25 - 150 |
| 13C2 PFHxDA | 91 | | 25 - 150 |
| 13C3 PFBS | 88 | | 25 - 150 |
| 18O2 PFHxS | 90 | | 25 - 150 |
| 13C4 PFOS | 92 | | 25 - 150 |
| 13C8 FOSA | 91 | | 10 - 150 |
| M2-4:2 FTS | 97 | | 25 - 150 |
| M2-6:2 FTS | 93 | | 25 - 150 |
| M2-8:2 FTS | 87 | | 25 - 150 |
| 13C2 10:2 FTS | 116 | | 25 - 150 |
| 13C3 HFPO-DA | 100 | | 25 - 150 |
| d3-NMeFOSAA | 85 | | 25 - 150 |
| d5-NEtFOSAA | 88 | | 25 - 150 |
| d-N-MeFOSA-M | 75 | | 10 - 150 |
| d-N-EtFOSA-M | 77 | | 10 - 150 |
| d7-N-MeFOSE-M | 78 | | 10 - 150 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 |

**Lab Sample ID: 320-72888-98 MSD**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MSD02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.1 | | 35.2 | 33.5 | | ng/L | | 80 | 70 - 130 | 7 | 30 |
| Perfluoropentanoic acid (PFPeA) | 4.4 | | 35.2 | 38.9 | | ng/L | | 98 | 70 - 130 | 4 | 30 |
| Perfluorohexanoic acid (PFHxA) | 3.1 | | 35.2 | 32.7 | | ng/L | | 84 | 70 - 130 | 5 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 1.4 | J | 35.2 | 32.1 | | ng/L | | 87 | 70 - 130 | 15 | 30 |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 35.2 | 33.2 | | ng/L | | 91 | 70 - 130 | 4 | 30 |
| Perfluorononanoic acid (PFNA) | ND | | 35.2 | 29.1 | | ng/L | | 83 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 35.2 | 29.1 | | ng/L | | 82 | 70 - 130 | 1 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 35.2 | 30.4 | | ng/L | | 86 | 70 - 130 | 0 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 35.2 | 28.9 | | ng/L | | 82 | 70 - 130 | 9 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 35.2 | 31.8 | | ng/L | | 90 | 70 - 130 | 2 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 35.2 | 27.9 | | ng/L | | 79 | 70 - 130 | 8 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 35.2 | 31.3 | | ng/L | | 89 | 70 - 130 | 2 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 35.2 | 29.8 | | ng/L | | 84 | 70 - 130 | 2 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 0.35 | J | 31.2 | 25.6 | | ng/L | | 81 | 70 - 130 | 12 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 33.1 | 28.3 | | ng/L | | 86 | 70 - 130 | 10 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-98 MSD**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MSD02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 0.83 | J | 32.1 | 26.3 | | ng/L | | 79 | 70 - 130 | 13 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 33.6 | 31.9 | | ng/L | | 95 | 70 - 130 | 1 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 0.62 | J | 32.7 | 28.0 | | ng/L | | 84 | 70 - 130 | 3 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 33.8 | 26.1 | | ng/L | | 77 | 70 - 130 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 34.0 | 27.8 | | ng/L | | 82 | 70 - 130 | 7 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 34.1 | 29.4 | | ng/L | | 86 | 70 - 130 | 2 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 0.97 | J | 35.2 | 29.6 | | ng/L | | 81 | 70 - 130 | 8 | 30 |
| NMeFOSA | ND | | 35.2 | 32.2 | | ng/L | | 91 | 70 - 130 | 6 | 30 |
| NEtFOSA | ND | | 35.2 | 28.5 | | ng/L | | 81 | 70 - 130 | 1 | 30 |
| NMeFOSAA | ND | | 35.2 | 29.0 | | ng/L | | 82 | 70 - 130 | 7 | 30 |
| NEtFOSAA | ND | | 35.2 | 29.2 | | ng/L | | 83 | 70 - 130 | 1 | 30 |
| NMeFOSE | ND | F1 | 35.2 | 24.4 | F1 | ng/L | | 69 | 70 - 130 | 25 | 30 |
| NEtFOSE | ND | | 35.2 | 28.9 | | ng/L | | 82 | 70 - 130 | 1 | 30 |
| 4:2 FTS | ND | | 32.9 | 25.7 | | ng/L | | 78 | 70 - 130 | 20 | 30 |
| 6:2 FTS | ND | | 33.4 | 26.8 | | ng/L | | 80 | 70 - 130 | 10 | 30 |
| 8:2 FTS | ND | | 33.8 | 29.3 | | ng/L | | 87 | 70 - 130 | 10 | 30 |
| 10:2 FTS | ND | | 34.0 | 25.9 | | ng/L | | 76 | 70 - 130 | 6 | 30 |
| HFPO-DA (GenX) | ND | | 35.2 | 33.2 | | ng/L | | 94 | 70 - 130 | 1 | 30 |
| F-53B Major | ND | | 32.9 | 29.7 | | ng/L | | 91 | 70 - 130 | 5 | 30 |
| F-53B Minor | ND | | 33.2 | 28.0 | | ng/L | | 84 | 70 - 130 | 0 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 33.2 | 29.8 | | ng/L | | 90 | 70 - 130 | 0 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *102* | | *25 - 150* |
| *13C5 PFPeA* | *87* | | *25 - 150* |
| *13C2 PFHxA* | *98* | | *25 - 150* |
| *13C4 PFHpA* | *98* | | *25 - 150* |
| *13C4 PFOA* | *98* | | *25 - 150* |
| *13C5 PFNA* | *102* | | *25 - 150* |
| *13C2 PFDA* | *91* | | *25 - 150* |
| *13C2 PFUnA* | *103* | | *25 - 150* |
| *13C2 PFDoA* | *97* | | *25 - 150* |
| *13C2 PFTeDA* | *94* | | *25 - 150* |
| *13C2 PFHxDA* | *98* | | *25 - 150* |
| *13C3 PFBS* | *96* | | *25 - 150* |
| *18O2 PFHxS* | *97* | | *25 - 150* |
| *13C4 PFOS* | *91* | | *25 - 150* |
| *13C8 FOSA* | *93* | | *10 - 150* |
| *M2-4:2 FTS* | *102* | | *25 - 150* |
| *M2-6:2 FTS* | *98* | | *25 - 150* |
| *M2-8:2 FTS* | *102* | | *25 - 150* |
| *13C2 10:2 FTS* | *119* | | *25 - 150* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-98 MSD**
**Matrix: Water**
**Analysis Batch: 485843**

**Client Sample ID: PWS-MSD02-042421**
**Prep Type: Total/NA**
**Prep Batch: 485554**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| d3-NMeFOSAA | 88 | | 25 - 150 |
| d5-NEtFOSAA | 86 | | 25 - 150 |
| d-N-MeFOSA-M | 80 | | 10 - 150 |
| d-N-EtFOSA-M | 80 | | 10 - 150 |
| d7-N-MeFOSE-M | 90 | | 10 - 150 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 |

**Lab Sample ID: MB 320-485555/1-A**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485555/1-A**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/03/21 19:43 | 05/05/21 12:46 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C5 PFPeA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFUnA* | *108* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFDoA* | *115* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFTeDA* | *109* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 PFHxDA* | *108* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C3 PFBS* | *95* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C8 FOSA* | *87* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *M2-6:2 FTS* | *89* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *M2-8:2 FTS* | *70* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C2 10:2 FTS* | *87* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d3-NMeFOSAA* | *70* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d5-NEtFOSAA* | *68* | | *25 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d-N-MeFOSA-M* | *81* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/03/21 19:43* | *05/05/21 12:46* | *1* |

**Lab Sample ID: LCS 320-485555/2-A**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 43.0 | | ng/L | | 107 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.5 | | ng/L | | 101 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 43.4 | | ng/L | | 109 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485555/2-A**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 45.3 | | ng/L | | 113 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 49.0 | | ng/L | | 123 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 36.0 | | ng/L | | 102 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 40.0 | | ng/L | | 107 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 40.2 | | ng/L | | 110 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 41.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.6 | | ng/L | | 99 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.2 | | ng/L | | 102 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 40.0 | | ng/L | | 104 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 39.9 | | ng/L | | 103 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 37.7 | | ng/L | | 94 | 60 - 135 |
| NMeFOSA | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| NEtFOSA | 40.0 | 45.0 | | ng/L | | 113 | 60 - 135 |
| NMeFOSAA | 40.0 | 37.3 | | ng/L | | 93 | 60 - 135 |
| NEtFOSAA | 40.0 | 40.2 | | ng/L | | 101 | 60 - 135 |
| NMeFOSE | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| NEtFOSE | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 |
| 4:2 FTS | 37.4 | 38.2 | | ng/L | | 102 | 60 - 135 |
| 6:2 FTS | 37.9 | 41.0 | | ng/L | | 108 | 60 - 135 |
| 8:2 FTS | 38.3 | 41.1 | | ng/L | | 107 | 60 - 135 |
| 10:2 FTS | 38.6 | 38.9 | | ng/L | | 101 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| F-53B Major | 37.3 | 39.5 | | ng/L | | 106 | 60 - 135 |
| F-53B Minor | 37.7 | 41.8 | | ng/L | | 111 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 42.7 | | ng/L | | 113 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* |
| *13C5 PFPeA* | *82* | | *25 - 150* |
| *13C2 PFHxA* | *90* | | *25 - 150* |
| *13C4 PFHpA* | *97* | | *25 - 150* |
| *13C4 PFOA* | *95* | | *25 - 150* |
| *13C5 PFNA* | *92* | | *25 - 150* |
| *13C2 PFDA* | *91* | | *25 - 150* |
| *13C2 PFUnA* | *97* | | *25 - 150* |
| *13C2 PFDoA* | *94* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485555/2-A**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C2 PFTeDA | 89 | | 25 - 150 |
| 13C2 PFHxDA | 90 | | 25 - 150 |
| 13C3 PFBS | 82 | | 25 - 150 |
| 18O2 PFHxS | 84 | | 25 - 150 |
| 13C4 PFOS | 83 | | 25 - 150 |
| 13C8 FOSA | 82 | | 10 - 150 |
| M2-4:2 FTS | 77 | | 25 - 150 |
| M2-6:2 FTS | 87 | | 25 - 150 |
| M2-8:2 FTS | 110 | | 25 - 150 |
| 13C2 10:2 FTS | 83 | | 25 - 150 |
| 13C3 HFPO-DA | 88 | | 25 - 150 |
| d3-NMeFOSAA | 75 | | 25 - 150 |
| d5-NEtFOSAA | 70 | | 25 - 150 |
| d-N-MeFOSA-M | 67 | | 10 - 150 |
| d-N-EtFOSA-M | 68 | | 10 - 150 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 |

**Lab Sample ID: 320-72888-115 MS**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: PWS-MS01-042521**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 41 | | 34.0 | 68.5 | | ng/L | | 82 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | ND | | 34.0 | 31.5 | | ng/L | | 93 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | ND | | 34.0 | 28.1 | | ng/L | | 83 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 34.0 | 30.7 | | ng/L | | 90 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 4.7 | | 34.0 | 36.9 | | ng/L | | 95 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 0.34 | J | 34.0 | 29.5 | | ng/L | | 86 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | 0.65 | J | 34.0 | 30.4 | | ng/L | | 88 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 34.0 | 28.7 | | ng/L | | 84 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 34.0 | 30.4 | | ng/L | | 90 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 34.0 | 28.6 | | ng/L | | 84 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 34.0 | 29.9 | | ng/L | | 88 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 34.0 | 30.5 | | ng/L | | 90 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 34.0 | 35.6 | | ng/L | | 105 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 16 | | 30.0 | 45.3 | | ng/L | | 97 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.7 | | 31.9 | 33.9 | | ng/L | | 101 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 4.6 | | 30.9 | 30.7 | | ng/L | | 84 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.50 | J | 32.3 | 30.5 | | ng/L | | 93 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 24 | | 31.5 | 54.7 | | ng/L | | 97 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-115 MS**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: PWS-MS01-042521**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | F1 | 32.6 | 26.5 | | ng/L | | 81 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.7 | 27.9 | | ng/L | | 85 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.9 | 24.6 | | ng/L | | 75 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 34.0 | 28.6 | | ng/L | | 84 | 70 - 130 |
| NMeFOSA | ND | | 34.0 | 31.7 | | ng/L | | 93 | 70 - 130 |
| NEtFOSA | ND | | 34.0 | 32.4 | | ng/L | | 95 | 70 - 130 |
| NMeFOSAA | ND | | 34.0 | 29.0 | | ng/L | | 85 | 70 - 130 |
| NEtFOSAA | ND | | 34.0 | 33.1 | | ng/L | | 97 | 70 - 130 |
| NMeFOSE | ND | | 34.0 | 32.5 | | ng/L | | 96 | 70 - 130 |
| NEtFOSE | ND | | 34.0 | 29.2 | | ng/L | | 86 | 70 - 130 |
| 4:2 FTS | ND | | 31.7 | 26.6 | | ng/L | | 84 | 70 - 130 |
| 6:2 FTS | ND | | 32.2 | 29.9 | | ng/L | | 93 | 70 - 130 |
| 8:2 FTS | ND | | 32.5 | 28.9 | | ng/L | | 89 | 70 - 130 |
| 10:2 FTS | ND | | 32.7 | 29.1 | | ng/L | | 89 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 34.0 | 29.4 | | ng/L | | 87 | 70 - 130 |
| F-53B Major | ND | | 31.6 | 30.3 | | ng/L | | 96 | 70 - 130 |
| F-53B Minor | ND | | 32.0 | 28.0 | | ng/L | | 87 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 32.0 | 34.6 | | ng/L | | 108 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* |
| *13C5 PFPeA* | *87* | | *25 - 150* |
| *13C2 PFHxA* | *98* | | *25 - 150* |
| *13C4 PFHpA* | *106* | | *25 - 150* |
| *13C4 PFOA* | *97* | | *25 - 150* |
| *13C5 PFNA* | *101* | | *25 - 150* |
| *13C2 PFDA* | *85* | | *25 - 150* |
| *13C2 PFUnA* | *89* | | *25 - 150* |
| *13C2 PFDoA* | *82* | | *25 - 150* |
| *13C2 PFTeDA* | *87* | | *25 - 150* |
| *13C2 PFHxDA* | *98* | | *25 - 150* |
| *13C3 PFBS* | *80* | | *25 - 150* |
| *18O2 PFHxS* | *93* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *80* | | *10 - 150* |
| *M2-4:2 FTS* | *126* | | *25 - 150* |
| *M2-6:2 FTS* | *94* | | *25 - 150* |
| *M2-8:2 FTS* | *79* | | *25 - 150* |
| *13C2 10:2 FTS* | *63* | | *25 - 150* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* |
| *d3-NMeFOSAA* | *61* | | *25 - 150* |
| *d5-NEtFOSAA* | *56* | | *25 - 150* |
| *d-N-MeFOSA-M* | *65* | | *10 - 150* |
| *d-N-EtFOSA-M* | *60* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *75* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-115 MS**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: PWS-MS01-042521**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| d9-N-EtFOSE-M | 74 | | 10 - 150 |

**Lab Sample ID: 320-72888-115 MSD**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: PWS-MSD01-042521**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 41 | | 33.2 | 69.6 | | ng/L | | 87 | 70 - 130 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | ND | | 33.2 | 29.7 | | ng/L | | 90 | 70 - 130 | 6 | 30 |
| Perfluorohexanoic acid (PFHxA) | ND | | 33.2 | 30.0 | | ng/L | | 90 | 70 - 130 | 7 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 33.2 | 29.1 | | ng/L | | 88 | 70 - 130 | 5 | 30 |
| Perfluorooctanoic acid (PFOA) | 4.7 | | 33.2 | 34.3 | | ng/L | | 89 | 70 - 130 | 7 | 30 |
| Perfluorononanoic acid (PFNA) | 0.34 | J | 33.2 | 29.2 | | ng/L | | 87 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | 0.65 | J | 33.2 | 31.6 | | ng/L | | 93 | 70 - 130 | 4 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.2 | 31.8 | | ng/L | | 96 | 70 - 130 | 10 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.2 | 31.9 | | ng/L | | 96 | 70 - 130 | 5 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.2 | 26.5 | | ng/L | | 80 | 70 - 130 | 7 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.2 | 30.7 | | ng/L | | 93 | 70 - 130 | 3 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.2 | 28.6 | | ng/L | | 86 | 70 - 130 | 6 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.2 | 34.3 | | ng/L | | 103 | 70 - 130 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 16 | | 29.3 | 42.1 | | ng/L | | 88 | 70 - 130 | 7 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.7 | | 31.1 | 29.4 | | ng/L | | 89 | 70 - 130 | 14 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 4.6 | | 30.2 | 29.7 | | ng/L | | 83 | 70 - 130 | 4 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.50 | J | 31.6 | 26.9 | | ng/L | | 84 | 70 - 130 | 12 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 24 | | 30.8 | 49.1 | | ng/L | | 81 | 70 - 130 | 11 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | F1 | 31.8 | 21.1 | F1 | ng/L | | 66 | 70 - 130 | 23 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.0 | 22.7 | | ng/L | | 71 | 70 - 130 | 21 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.1 | 23.0 | | ng/L | | 72 | 70 - 130 | 7 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 33.2 | 29.1 | | ng/L | | 88 | 70 - 130 | 2 | 30 |
| NMeFOSA | ND | | 33.2 | 30.5 | | ng/L | | 92 | 70 - 130 | 4 | 30 |
| NEtFOSA | ND | | 33.2 | 33.7 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| NMeFOSAA | ND | | 33.2 | 27.6 | | ng/L | | 83 | 70 - 130 | 5 | 30 |
| NEtFOSAA | ND | | 33.2 | 29.7 | | ng/L | | 90 | 70 - 130 | 11 | 30 |
| NMeFOSE | ND | | 33.2 | 29.9 | | ng/L | | 90 | 70 - 130 | 9 | 30 |
| NEtFOSE | ND | | 33.2 | 26.7 | | ng/L | | 81 | 70 - 130 | 9 | 30 |
| 4:2 FTS | ND | | 31.0 | 26.7 | | ng/L | | 86 | 70 - 130 | 1 | 30 |
| 6:2 FTS | ND | | 31.4 | 30.9 | | ng/L | | 98 | 70 - 130 | 4 | 30 |
| 8:2 FTS | ND | | 31.8 | 30.2 | | ng/L | | 95 | 70 - 130 | 4 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-115 MSD**
**Matrix: Water**
**Analysis Batch: 486301**

**Client Sample ID: PWS-MSD01-042521**
**Prep Type: Total/NA**
**Prep Batch: 485555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10:2 FTS | ND | | 32.0 | 29.5 | | ng/L | | 92 | 70 - 130 | 1 | 30 |
| HFPO-DA (GenX) | ND | | 33.2 | 29.9 | | ng/L | | 90 | 70 - 130 | 1 | 30 |
| F-53B Major | ND | | 30.9 | 27.3 | | ng/L | | 88 | 70 - 130 | 11 | 30 |
| F-53B Minor | ND | | 31.2 | 22.2 | | ng/L | | 71 | 70 - 130 | 23 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.2 | 29.3 | | ng/L | | 94 | 70 - 130 | 17 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *66* | | *25 - 150* |
| *13C5 PFPeA* | *79* | | *25 - 150* |
| *13C2 PFHxA* | *90* | | *25 - 150* |
| *13C4 PFHpA* | *95* | | *25 - 150* |
| *13C4 PFOA* | *102* | | *25 - 150* |
| *13C5 PFNA* | *91* | | *25 - 150* |
| *13C2 PFDA* | *85* | | *25 - 150* |
| *13C2 PFUnA* | *81* | | *25 - 150* |
| *13C2 PFDoA* | *75* | | *25 - 150* |
| *13C2 PFTeDA* | *75* | | *25 - 150* |
| *13C2 PFHxDA* | *88* | | *25 - 150* |
| *13C3 PFBS* | *72* | | *25 - 150* |
| *18O2 PFHxS* | *77* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *76* | | *10 - 150* |
| *M2-4:2 FTS* | *118* | | *25 - 150* |
| *M2-6:2 FTS* | *90* | | *25 - 150* |
| *M2-8:2 FTS* | *79* | | *25 - 150* |
| *13C2 10:2 FTS* | *60* | | *25 - 150* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* |
| *d3-NMeFOSAA* | *62* | | *25 - 150* |
| *d5-NEtFOSAA* | *58* | | *25 - 150* |
| *d-N-MeFOSA-M* | *60* | | *10 - 150* |
| *d-N-EtFOSA-M* | *57* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* |

**Lab Sample ID: MB 320-485957/1-A**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485957/1-A**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/04/21 19:44 | 05/05/21 18:35 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFDoA* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFTeDA* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *18O2 PFHxS* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C4 PFOS* | *80* | | *25 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |
| *13C8 FOSA* | *77* | | *10 - 150* | *05/04/21 19:44* | *05/05/21 18:35* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485957/1-A**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| M2-4:2 FTS | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| M2-6:2 FTS | 87 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| M2-8:2 FTS | 105 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 13C2 10:2 FTS | 88 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d3-NMeFOSAA | 70 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d5-NEtFOSAA | 74 | | 25 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d-N-MeFOSA-M | 67 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d-N-EtFOSA-M | 72 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d7-N-MeFOSE-M | 99 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |
| d9-N-EtFOSE-M | 98 | | 10 - 150 | 05/04/21 19:44 | 05/05/21 18:35 | 1 |

**Lab Sample ID: LCS 320-485957/2-A**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 39.6 | | ng/L | | 99 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 46.7 | | ng/L | | 117 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 39.4 | | ng/L | | 98 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 37.9 | | ng/L | | 95 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 34.7 | | ng/L | | 87 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 37.4 | | ng/L | | 93 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 48.8 | | ng/L | | 122 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 33.9 | | ng/L | | 96 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 36.8 | | ng/L | | 98 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 38.0 | | ng/L | | 104 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 39.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.2 | | ng/L | | 97 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.5 | | ng/L | | 103 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 38.1 | | ng/L | | 99 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 39.6 | | ng/L | | 102 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485957/2-A**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 37.2 | | ng/L | | 93 | 60 - 135 |
| NMeFOSA | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| NEtFOSA | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| NMeFOSAA | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| NMeFOSE | 40.0 | 39.0 | | ng/L | | 97 | 60 - 135 |
| NEtFOSE | 40.0 | 37.7 | | ng/L | | 94 | 60 - 135 |
| 4:2 FTS | 37.4 | 37.7 | | ng/L | | 101 | 60 - 135 |
| 6:2 FTS | 37.9 | 39.8 | | ng/L | | 105 | 60 - 135 |
| 8:2 FTS | 38.3 | 41.1 | | ng/L | | 107 | 60 - 135 |
| 10:2 FTS | 38.6 | 35.4 | | ng/L | | 92 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| F-53B Major | 37.3 | 43.5 | | ng/L | | 117 | 60 - 135 |
| F-53B Minor | 37.7 | 42.2 | | ng/L | | 112 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 43.5 | | ng/L | | 115 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* |
| *13C5 PFPeA* | *84* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *96* | | *25 - 150* |
| *13C4 PFOA* | *99* | | *25 - 150* |
| *13C5 PFNA* | *102* | | *25 - 150* |
| *13C2 PFDA* | *93* | | *25 - 150* |
| *13C2 PFUnA* | *97* | | *25 - 150* |
| *13C2 PFDoA* | *95* | | *25 - 150* |
| *13C2 PFTeDA* | *98* | | *25 - 150* |
| *13C2 PFHxDA* | *88* | | *25 - 150* |
| *13C3 PFBS* | *87* | | *25 - 150* |
| *18O2 PFHxS* | *82* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *81* | | *10 - 150* |
| *M2-4:2 FTS* | *71* | | *25 - 150* |
| *M2-6:2 FTS* | *88* | | *25 - 150* |
| *M2-8:2 FTS* | *100* | | *25 - 150* |
| *13C2 10:2 FTS* | *83* | | *25 - 150* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* |
| *d5-NEtFOSAA* | *69* | | *25 - 150* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *106* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *102* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-17 MS**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: PWS-MS02-042221**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.3 | J | 36.1 | 40.1 | | ng/L | | 102 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | ND | | 36.1 | 37.4 | | ng/L | | 104 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 0.63 | J | 36.1 | 34.8 | | ng/L | | 95 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 0.25 | J | 36.1 | 42.1 | | ng/L | | 116 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 36.1 | 37.1 | | ng/L | | 99 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 36.1 | 34.7 | | ng/L | | 96 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.1 | 33.5 | | ng/L | | 93 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.1 | 37.2 | | ng/L | | 103 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.1 | 42.4 | | ng/L | | 117 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.1 | 35.7 | | ng/L | | 99 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.1 | 38.0 | | ng/L | | 105 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.1 | 38.4 | | ng/L | | 107 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.1 | 42.0 | | ng/L | | 117 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 2.7 | | 31.9 | 35.7 | | ng/L | | 104 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.46 | J | 33.8 | 39.2 | | ng/L | | 115 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 32.8 | 34.2 | | ng/L | | 98 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 34.3 | 33.0 | | ng/L | | 96 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | I | 33.5 | 35.7 | | ng/L | | 96 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 34.6 | 31.7 | | ng/L | | 92 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 34.8 | 33.3 | | ng/L | | 96 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 34.9 | 34.5 | | ng/L | | 99 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 36.1 | 35.4 | | ng/L | | 94 | 70 - 130 |
| NMeFOSA | ND | | 36.1 | 35.0 | | ng/L | | 97 | 70 - 130 |
| NEtFOSA | ND | | 36.1 | 36.9 | | ng/L | | 102 | 70 - 130 |
| NMeFOSAA | ND | | 36.1 | 34.5 | | ng/L | | 96 | 70 - 130 |
| NEtFOSAA | ND | | 36.1 | 37.8 | | ng/L | | 105 | 70 - 130 |
| NMeFOSE | ND | | 36.1 | 37.0 | | ng/L | | 103 | 70 - 130 |
| NEtFOSE | ND | | 36.1 | 36.7 | | ng/L | | 102 | 70 - 130 |
| 4:2 FTS | ND | | 33.7 | 34.0 | | ng/L | | 101 | 70 - 130 |
| 6:2 FTS | ND | | 34.2 | 39.4 | | ng/L | | 115 | 70 - 130 |
| 8:2 FTS | ND | | 34.5 | 39.5 | | ng/L | | 114 | 70 - 130 |
| 10:2 FTS | ND | | 34.8 | 37.1 | | ng/L | | 107 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 36.1 | 36.6 | | ng/L | | 102 | 70 - 130 |
| F-53B Major | ND | | 33.6 | 35.1 | | ng/L | | 104 | 70 - 130 |
| F-53B Minor | ND | | 34.0 | 33.0 | | ng/L | | 97 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.0 | 37.9 | | ng/L | | 111 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 89 | | 25 - 150 |
| 13C5 PFPeA | 91 | | 25 - 150 |
| 13C2 PFHxA | 99 | | 25 - 150 |
| 13C4 PFHpA | 94 | | 25 - 150 |
| 13C4 PFOA | 101 | | 25 - 150 |
| 13C5 PFNA | 96 | | 25 - 150 |
| 13C2 PFDA | 102 | | 25 - 150 |
| 13C2 PFUnA | 95 | | 25 - 150 |
| 13C2 PFDoA | 89 | | 25 - 150 |
| 13C2 PFTeDA | 90 | | 25 - 150 |
| 13C2 PFHxDA | 96 | | 25 - 150 |
| 13C3 PFBS | 81 | | 25 - 150 |
| 18O2 PFHxS | 88 | | 25 - 150 |
| 13C4 PFOS | 84 | | 25 - 150 |
| 13C8 FOSA | 82 | | 10 - 150 |
| M2-4:2 FTS | 103 | | 25 - 150 |
| M2-6:2 FTS | 72 | | 25 - 150 |
| M2-8:2 FTS | 64 | | 25 - 150 |
| 13C2 10:2 FTS | 63 | | 25 - 150 |
| 13C3 HFPO-DA | 93 | | 25 - 150 |
| d3-NMeFOSAA | 58 | | 25 - 150 |
| d5-NEtFOSAA | 53 | | 25 - 150 |
| d-N-MeFOSA-M | 77 | | 10 - 150 |
| d-N-EtFOSA-M | 69 | | 10 - 150 |
| d7-N-MeFOSE-M | 79 | | 10 - 150 |
| d9-N-EtFOSE-M | 70 | | 10 - 150 |

**Lab Sample ID: 320-72888-17 MSD** — **Client Sample ID: PWS-MSD02-042221**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 486307** — **Prep Batch: 485957**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.3 | J | 36.5 | 39.6 | | ng/L | | 99 | 70 - 130 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | ND | | 36.5 | 36.8 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| Perfluorohexanoic acid (PFHxA) | 0.63 | J | 36.5 | 34.8 | | ng/L | | 94 | 70 - 130 | 0 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 0.25 | J | 36.5 | 41.0 | | ng/L | | 112 | 70 - 130 | 3 | 30 |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 36.5 | 39.2 | | ng/L | | 103 | 70 - 130 | 6 | 30 |
| Perfluorononanoic acid (PFNA) | ND | | 36.5 | 39.0 | | ng/L | | 107 | 70 - 130 | 11 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.5 | 37.3 | | ng/L | | 102 | 70 - 130 | 11 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.5 | 36.8 | | ng/L | | 101 | 70 - 130 | 1 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.5 | 36.2 | | ng/L | | 99 | 70 - 130 | 16 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.5 | 39.1 | | ng/L | | 107 | 70 - 130 | 9 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.5 | 36.9 | | ng/L | | 101 | 70 - 130 | 3 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.5 | 43.1 | | ng/L | | 118 | 70 - 130 | 11 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.5 | 47.3 | | ng/L | | 130 | 70 - 130 | 12 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 2.7 | | 32.3 | 36.0 | | ng/L | | 103 | 70 - 130 | 1 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-17 MSD**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: PWS-MSD02-042221**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 0.46 | J | 34.3 | 35.7 | | ng/L | | 103 | 70 - 130 | 9 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 33.2 | 37.3 | | ng/L | | 106 | 70 - 130 | 9 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 34.8 | 34.3 | | ng/L | | 99 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | I | 33.9 | 39.0 | | ng/L | | 105 | 70 - 130 | 9 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.1 | 34.2 | | ng/L | | 98 | 70 - 130 | 8 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.2 | 34.8 | | ng/L | | 99 | 70 - 130 | 4 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.4 | 36.0 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 36.5 | 40.9 | | ng/L | | 108 | 70 - 130 | 14 | 30 |
| NMeFOSA | ND | | 36.5 | 36.5 | | ng/L | | 100 | 70 - 130 | 4 | 30 |
| NEtFOSA | ND | | 36.5 | 38.8 | | ng/L | | 106 | 70 - 130 | 5 | 30 |
| NMeFOSAA | ND | | 36.5 | 39.1 | | ng/L | | 107 | 70 - 130 | 12 | 30 |
| NEtFOSAA | ND | | 36.5 | 37.8 | | ng/L | | 103 | 70 - 130 | 0 | 30 |
| NMeFOSE | ND | | 36.5 | 36.5 | | ng/L | | 100 | 70 - 130 | 2 | 30 |
| NEtFOSE | ND | | 36.5 | 38.5 | | ng/L | | 105 | 70 - 130 | 5 | 30 |
| 4:2 FTS | ND | | 34.1 | 37.2 | | ng/L | | 109 | 70 - 130 | 9 | 30 |
| 6:2 FTS | ND | | 34.6 | 40.5 | | ng/L | | 117 | 70 - 130 | 3 | 30 |
| 8:2 FTS | ND | | 35.0 | 39.2 | | ng/L | | 112 | 70 - 130 | 1 | 30 |
| 10:2 FTS | ND | | 35.2 | 34.3 | | ng/L | | 97 | 70 - 130 | 8 | 30 |
| HFPO-DA (GenX) | ND | | 36.5 | 38.9 | | ng/L | | 107 | 70 - 130 | 6 | 30 |
| F-53B Major | ND | | 34.1 | 37.2 | | ng/L | | 109 | 70 - 130 | 6 | 30 |
| F-53B Minor | ND | | 34.4 | 36.2 | | ng/L | | 105 | 70 - 130 | 9 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.4 | 41.9 | | ng/L | | 122 | 70 - 130 | 10 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* |
| *13C5 PFPeA* | *92* | | *25 - 150* |
| *13C2 PFHxA* | *106* | | *25 - 150* |
| *13C4 PFHpA* | *104* | | *25 - 150* |
| *13C4 PFOA* | *108* | | *25 - 150* |
| *13C5 PFNA* | *96* | | *25 - 150* |
| *13C2 PFDA* | *95* | | *25 - 150* |
| *13C2 PFUnA* | *89* | | *25 - 150* |
| *13C2 PFDoA* | *87* | | *25 - 150* |
| *13C2 PFTeDA* | *95* | | *25 - 150* |
| *13C2 PFHxDA* | *93* | | *25 - 150* |
| *13C3 PFBS* | *86* | | *25 - 150* |
| *18O2 PFHxS* | *87* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *82* | | *10 - 150* |
| *M2-4:2 FTS* | *96* | | *25 - 150* |
| *M2-6:2 FTS* | *84* | | *25 - 150* |
| *M2-8:2 FTS* | *89* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-72888-17 MSD**
**Matrix: Water**
**Analysis Batch: 486307**

**Client Sample ID: PWS-MSD02-042221**
**Prep Type: Total/NA**
**Prep Batch: 485957**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 77 | | 25 - 150 |
| 13C3 HFPO-DA | 94 | | 25 - 150 |
| d3-NMeFOSAA | 71 | | 25 - 150 |
| d5-NEtFOSAA | 73 | | 25 - 150 |
| d-N-MeFOSA-M | 75 | | 10 - 150 |
| d-N-EtFOSA-M | 69 | | 10 - 150 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 |
| d9-N-EtFOSE-M | 92 | | 10 - 150 |

## LCMS

### Prep Batch: 485143

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-35 | PWS-FD01-042321 | Total/NA | Water | 3535 | |
| 320-72888-36 | PWS1016-OS-042122-100 | Total/NA | Water | 3535 | |
| 320-72888-38 | PWS1037-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-40 | PWS1041-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-42 | PWS1045-OS-042321-100 | Total/NA | Water | 3535 | |
| MB 320-485143/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485143/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72888-36 MS | PWS-MS01-042321 | Total/NA | Water | 3535 | |
| 320-72888-36 MSD | PWS-MSD01-042321 | Total/NA | Water | 3535 | |

### Prep Batch: 485144

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-44 | PWS1057-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-46 | PWS1056-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-48 | PWS1058-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-50 | PWS1061-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-52 | PWS1060-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-54 | PWS1039-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-56 | PWS1176-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-58 | PWS1142-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-60 | PWS-FD02-042321 | Total/NA | Water | 3535 | |
| 320-72888-61 | PWS1137-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-63 | PWS1131-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-65 | PWS1126-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-67 | PWS1123-OS-042321-100 | Total/NA | Water | 3535 | |
| MB 320-485144/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485144/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-485144/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Prep Batch: 485554

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-33 | PWS1030-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-69 | PWS1117-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-71 | PWS1107-OS-042321-100 | Total/NA | Water | 3535 | |
| 320-72888-73 | PWS1062-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-75 | PWS1064-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-77 | PWS-FD01-042421 | Total/NA | Water | 3535 | |
| 320-72888-78 | PWS1067-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-80 | PWS1069-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-82 | PWS1059-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-84 | PWS1068-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-86 | PWS1072-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-88 | PWS1074-IS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-90 | PWS1065-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-92 | PWS1075-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-94 | PWS1079-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-96 | PWS1108-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-98 | PWS1109-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-100 | PWS1159-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-102 | PWS-FD02-042421 | Total/NA | Water | 3535 | |
| MB 320-485554/1-A | Method Blank | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 485554 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 320-485554/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72888-73 MS | PWS-MS01-042401 | Total/NA | Water | 3535 | |
| 320-72888-73 MSD | PWS-MSD01-042401 | Total/NA | Water | 3535 | |
| 320-72888-98 MS | PWS-MS02-042421 | Total/NA | Water | 3535 | |
| 320-72888-98 MSD | PWS-MSD02-042421 | Total/NA | Water | 3535 | |

### Prep Batch: 485555

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-103 | PWS1133-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-105 | PWS1116-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-107 | PWS1175-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-109 | PWS1143-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-111 | PWS1162-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-113 | PWS1156-OS-042421-100 | Total/NA | Water | 3535 | |
| 320-72888-115 | PWS1053-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-117 | PWS1077-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-119 | PWS-FD01-042521 | Total/NA | Water | 3535 | |
| 320-72888-120 | PWS1083-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-122 | PWS1046-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-124 | PWS1081-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-126 | PWS1029-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-130 | PWS1144-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-132 | PWS1165-OS-042521-100 | Total/NA | Water | 3535 | |
| 320-72888-134 | PWS-FD02-042521 | Total/NA | Water | 3535 | |
| 320-72888-137 | PWS1078-OS-042521-100 | Total/NA | Water | 3535 | |
| MB 320-485555/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485555/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72888-115 MS | PWS-MS01-042521 | Total/NA | Water | 3535 | |
| 320-72888-115 MSD | PWS-MSD01-042521 | Total/NA | Water | 3535 | |

### Analysis Batch: 485843

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-33 | PWS1030-OS-042321-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-69 | PWS1117-OS-042321-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-71 | PWS1107-OS-042321-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-73 | PWS1062-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-75 | PWS1064-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-77 | PWS-FD01-042421 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-78 | PWS1067-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-80 | PWS1069-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-82 | PWS1059-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-84 | PWS1068-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-86 | PWS1072-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-88 | PWS1074-IS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-90 | PWS1065-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-92 | PWS1075-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-94 | PWS1079-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-96 | PWS1108-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-98 | PWS1109-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-100 | PWS1159-OS-042421-100 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-102 | PWS-FD02-042421 | Total/NA | Water | 537 (modified) | 485554 |

## LCMS (Continued)

### Analysis Batch: 485843 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 320-485554/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485554 |
| LCS 320-485554/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-73 MS | PWS-MS01-042401 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-73 MSD | PWS-MSD01-042401 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-98 MS | PWS-MS02-042421 | Total/NA | Water | 537 (modified) | 485554 |
| 320-72888-98 MSD | PWS-MSD02-042421 | Total/NA | Water | 537 (modified) | 485554 |

### Prep Batch: 485957

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-1 | PWS1049-OS-042122-100 | Total/NA | Water | 3535 | |
| 320-72888-3 | PWS-FD01-042221 | Total/NA | Water | 3535 | |
| 320-72888-4 | PWS1051-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-6 | PWS1047-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-8 | PWS1055-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-10 | PWS1054-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-12 | PWS1048-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-14 | PWS1152-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-16 | PWS-FD02-042221 | Total/NA | Water | 3535 | |
| 320-72888-17 | PWS1151-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-19 | PWS1139-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-21 | PWS1146-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-23 | PWS1138-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-25 | PWS1120-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-27 | PWS1122-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-29 | PWS1119-OS-042221-100 | Total/NA | Water | 3535 | |
| 320-72888-31 | PWS1173-OS-042221-100 | Total/NA | Water | 3535 | |
| MB 320-485957/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485957/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-72888-17 MS | PWS-MS02-042221 | Total/NA | Water | 3535 | |
| 320-72888-17 MSD | PWS-MSD02-042221 | Total/NA | Water | 3535 | |

### Analysis Batch: 486017

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-44 | PWS1057-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-46 | PWS1056-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-48 | PWS1058-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-50 | PWS1061-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-52 | PWS1060-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-54 | PWS1039-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-56 | PWS1176-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-58 | PWS1142-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-60 | PWS-FD02-042321 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-61 | PWS1137-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-63 | PWS1131-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-65 | PWS1126-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| 320-72888-67 | PWS1123-OS-042321-100 | Total/NA | Water | 537 (modified) | 485144 |
| MB 320-485144/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485144 |
| LCS 320-485144/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485144 |
| LCSD 320-485144/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 485144 |

## LCMS

### Analysis Batch: 486210

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-35 | PWS-FD01-042321 | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-36 | PWS1016-OS-042122-100 | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-38 | PWS1037-OS-042321-100 | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-40 | PWS1041-OS-042321-100 | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-42 | PWS1045-OS-042321-100 | Total/NA | Water | 537 (modified) | 485143 |
| MB 320-485143/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485143 |
| LCS 320-485143/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-36 MS | PWS-MS01-042321 | Total/NA | Water | 537 (modified) | 485143 |
| 320-72888-36 MSD | PWS-MSD01-042321 | Total/NA | Water | 537 (modified) | 485143 |

### Analysis Batch: 486301

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-103 | PWS1133-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-105 | PWS1116-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-107 | PWS1175-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-109 | PWS1143-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-111 | PWS1162-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-113 | PWS1156-OS-042421-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-115 | PWS1053-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-117 | PWS1077-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-119 | PWS-FD01-042521 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-120 | PWS1083-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-122 | PWS1046-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-124 | PWS1081-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-126 | PWS1029-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-130 | PWS1144-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-132 | PWS1165-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-134 | PWS-FD02-042521 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-137 | PWS1078-OS-042521-100 | Total/NA | Water | 537 (modified) | 485555 |
| MB 320-485555/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485555 |
| LCS 320-485555/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-115 MS | PWS-MS01-042521 | Total/NA | Water | 537 (modified) | 485555 |
| 320-72888-115 MSD | PWS-MSD01-042521 | Total/NA | Water | 537 (modified) | 485555 |

### Analysis Batch: 486307

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-1 | PWS1049-OS-042122-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-3 | PWS-FD01-042221 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-4 | PWS1051-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-6 | PWS1047-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-8 | PWS1055-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-10 | PWS1054-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-12 | PWS1048-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-14 | PWS1152-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-16 | PWS-FD02-042221 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-17 | PWS1151-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-19 | PWS1139-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-21 | PWS1146-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-23 | PWS1138-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-25 | PWS1120-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-27 | PWS1122-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |

## LCMS (Continued)

### Analysis Batch: 486307 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-29 | PWS1119-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-31 | PWS1173-OS-042221-100 | Total/NA | Water | 537 (modified) | 485957 |
| MB 320-485957/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485957 |
| LCS 320-485957/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-17 MS | PWS-MS02-042221 | Total/NA | Water | 537 (modified) | 485957 |
| 320-72888-17 MSD | PWS-MSD02-042221 | Total/NA | Water | 537 (modified) | 485957 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1049-OS-042122-100
**Lab Sample ID: 320-72888-1**
**Date Collected: 04/22/21 08:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 299.2 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 18:53 | K1S | TAL SAC |

## Client Sample ID: PWS-FD01-042221
**Lab Sample ID: 320-72888-3**
**Date Collected: 04/22/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.2 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:02 | K1S | TAL SAC |

## Client Sample ID: PWS1051-OS-042221-100
**Lab Sample ID: 320-72888-4**
**Date Collected: 04/22/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.1 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:11 | K1S | TAL SAC |

## Client Sample ID: PWS1047-OS-042221-100
**Lab Sample ID: 320-72888-6**
**Date Collected: 04/22/21 12:38**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 296.1 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:21 | K1S | TAL SAC |

## Client Sample ID: PWS1055-OS-042221-100
**Lab Sample ID: 320-72888-8**
**Date Collected: 04/22/21 13:54**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 293.8 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:30 | K1S | TAL SAC |

## Client Sample ID: PWS1054-OS-042221-100
**Lab Sample ID: 320-72888-10**
**Date Collected: 04/22/21 14:43**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 300.1 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:39 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1048-OS-042221-100
**Lab Sample ID: 320-72888-12**
**Date Collected: 04/22/21 18:47**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.9 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:48 | K1S | TAL SAC |

## Client Sample ID: PWS1152-OS-042221-100
**Lab Sample ID: 320-72888-14**
**Date Collected: 04/22/21 08:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 276 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 19:57 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-042221
**Lab Sample ID: 320-72888-16**
**Date Collected: 04/22/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 281.7 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 20:34 | K1S | TAL SAC |

## Client Sample ID: PWS1151-OS-042221-100
**Lab Sample ID: 320-72888-17**
**Date Collected: 04/22/21 09:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 282.7 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 20:43 | K1S | TAL SAC |

## Client Sample ID: PWS1139-OS-042221-100
**Lab Sample ID: 320-72888-19**
**Date Collected: 04/22/21 10:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.5 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:10 | K1S | TAL SAC |

## Client Sample ID: PWS1146-OS-042221-100
**Lab Sample ID: 320-72888-21**
**Date Collected: 04/22/21 11:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.6 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:19 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1138-OS-042221-100
**Lab Sample ID: 320-72888-23**
**Date Collected: 04/22/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.6 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:29 | K1S | TAL SAC |

## Client Sample ID: PWS1120-OS-042221-100
**Lab Sample ID: 320-72888-25**
**Date Collected: 04/22/21 13:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 296.1 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:38 | K1S | TAL SAC |

## Client Sample ID: PWS1122-OS-042221-100
**Lab Sample ID: 320-72888-27**
**Date Collected: 04/22/21 14:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.4 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:47 | K1S | TAL SAC |

## Client Sample ID: PWS1119-OS-042221-100
**Lab Sample ID: 320-72888-29**
**Date Collected: 04/22/21 15:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.7 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 21:56 | K1S | TAL SAC |

## Client Sample ID: PWS1173-OS-042221-100
**Lab Sample ID: 320-72888-31**
**Date Collected: 04/22/21 16:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.2 mL | 10.00 mL | 485957 | 05/04/21 19:44 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486307 | 05/05/21 22:33 | K1S | TAL SAC |

## Client Sample ID: PWS1030-OS-042321-100
**Lab Sample ID: 320-72888-33**
**Date Collected: 04/23/21 08:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 19:41 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS-FD01-042321
**Lab Sample ID: 320-72888-35**
**Date Collected: 04/23/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.2 mL | 10.0 mL | 485143 | 05/03/21 04:20 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486210 | 05/05/21 22:46 | S1M | TAL SAC |

## Client Sample ID: PWS1016-OS-042122-100
**Lab Sample ID: 320-72888-36**
**Date Collected: 04/23/21 09:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 259.5 mL | 10.0 mL | 485143 | 05/03/21 04:20 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486210 | 05/05/21 23:24 | S1M | TAL SAC |

## Client Sample ID: PWS1037-OS-042321-100
**Lab Sample ID: 320-72888-38**
**Date Collected: 04/23/21 10:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275.8 mL | 10.0 mL | 485143 | 05/03/21 04:20 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486210 | 05/05/21 23:52 | S1M | TAL SAC |

## Client Sample ID: PWS1041-OS-042321-100
**Lab Sample ID: 320-72888-40**
**Date Collected: 04/23/21 11:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 257.9 mL | 10.0 mL | 485143 | 05/03/21 04:20 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486210 | 05/06/21 00:01 | S1M | TAL SAC |

## Client Sample ID: PWS1045-OS-042321-100
**Lab Sample ID: 320-72888-42**
**Date Collected: 04/23/21 12:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 268.6 mL | 10.0 mL | 485143 | 05/03/21 04:20 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486210 | 05/06/21 00:11 | S1M | TAL SAC |

## Client Sample ID: PWS1057-OS-042321-100
**Lab Sample ID: 320-72888-44**
**Date Collected: 04/23/21 13:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.4 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 09:28 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1056-OS-042321-100
**Lab Sample ID: 320-72888-46**
**Date Collected: 04/23/21 14:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.3 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 09:37 | K1S | TAL SAC |

## Client Sample ID: PWS1058-OS-042321-100
**Lab Sample ID: 320-72888-48**
**Date Collected: 04/23/21 15:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.7 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 09:47 | K1S | TAL SAC |

## Client Sample ID: PWS1061-OS-042321-100
**Lab Sample ID: 320-72888-50**
**Date Collected: 04/23/21 16:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.9 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 09:56 | K1S | TAL SAC |

## Client Sample ID: PWS1060-OS-042321-100
**Lab Sample ID: 320-72888-52**
**Date Collected: 04/23/21 17:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.9 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 10:05 | K1S | TAL SAC |

## Client Sample ID: PWS1039-OS-042321-100
**Lab Sample ID: 320-72888-54**
**Date Collected: 04/23/21 19:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278.3 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 10:15 | K1S | TAL SAC |

## Client Sample ID: PWS1176-OS-042321-100
**Lab Sample ID: 320-72888-56**
**Date Collected: 04/23/21 08:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 262.3 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 10:24 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1142-OS-042321-100
**Lab Sample ID: 320-72888-58**
**Date Collected: 04/23/21 09:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.6 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:02 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-042321
**Lab Sample ID: 320-72888-60**
**Date Collected: 04/23/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.1 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:11 | K1S | TAL SAC |

## Client Sample ID: PWS1137-OS-042321-100
**Lab Sample ID: 320-72888-61**
**Date Collected: 04/23/21 10:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 262.3 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:21 | K1S | TAL SAC |

## Client Sample ID: PWS1131-OS-042321-100
**Lab Sample ID: 320-72888-63**
**Date Collected: 04/23/21 11:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278.9 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:30 | K1S | TAL SAC |

## Client Sample ID: PWS1126-OS-042321-100
**Lab Sample ID: 320-72888-65**
**Date Collected: 04/23/21 12:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.4 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:39 | K1S | TAL SAC |

## Client Sample ID: PWS1123-OS-042321-100
**Lab Sample ID: 320-72888-67**
**Date Collected: 04/23/21 13:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.3 mL | 10.0 mL | 485144 | 05/03/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486017 | 05/05/21 11:49 | K1S | TAL SAC |

## Client Sample ID: PWS1117-OS-042321-100
**Lab Sample ID: 320-72888-69**

**Date Collected: 04/23/21 14:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.3 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 19:50 | RS1 | TAL SAC |

## Client Sample ID: PWS1107-OS-042321-100
**Lab Sample ID: 320-72888-71**

**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 282.2 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 20:00 | RS1 | TAL SAC |

## Client Sample ID: PWS1062-OS-042421-100
**Lab Sample ID: 320-72888-73**

**Date Collected: 04/24/21 08:45**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 280.2 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 20:09 | RS1 | TAL SAC |

## Client Sample ID: PWS1064-OS-042421-100
**Lab Sample ID: 320-72888-75**

**Date Collected: 04/24/21 09:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.6 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 20:37 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD01-042421
**Lab Sample ID: 320-72888-77**

**Date Collected: 04/24/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298.5 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 20:47 | RS1 | TAL SAC |

## Client Sample ID: PWS1067-OS-042421-100
**Lab Sample ID: 320-72888-78**

**Date Collected: 04/24/21 10:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 292.3 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 21:25 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1069-OS-042421-100
**Lab Sample ID: 320-72888-80**
**Date Collected: 04/24/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 282.6 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 21:34 | RS1 | TAL SAC |

## Client Sample ID: PWS1059-OS-042421-100
**Lab Sample ID: 320-72888-82**
**Date Collected: 04/24/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278.2 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 21:43 | RS1 | TAL SAC |

## Client Sample ID: PWS1068-OS-042421-100
**Lab Sample ID: 320-72888-84**
**Date Collected: 04/24/21 13:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275.4 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 21:53 | RS1 | TAL SAC |

## Client Sample ID: PWS1072-OS-042421-100
**Lab Sample ID: 320-72888-86**
**Date Collected: 04/24/21 14:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.6 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:02 | RS1 | TAL SAC |

## Client Sample ID: PWS1074-IS-042421-100
**Lab Sample ID: 320-72888-88**
**Date Collected: 04/24/21 15:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.1 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:12 | RS1 | TAL SAC |

## Client Sample ID: PWS1065-OS-042421-100
**Lab Sample ID: 320-72888-90**
**Date Collected: 04/24/21 16:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298.7 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:21 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1075-OS-042421-100
**Lab Sample ID: 320-72888-92**
**Date Collected: 04/24/21 17:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.5 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:30 | RS1 | TAL SAC |

## Client Sample ID: PWS1079-OS-042421-100
**Lab Sample ID: 320-72888-94**
**Date Collected: 04/24/21 18:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.7 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:40 | RS1 | TAL SAC |

## Client Sample ID: PWS1108-OS-042421-100
**Lab Sample ID: 320-72888-96**
**Date Collected: 04/24/21 08:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 22:49 | RS1 | TAL SAC |

## Client Sample ID: PWS1109-OS-042421-100
**Lab Sample ID: 320-72888-98**
**Date Collected: 04/24/21 09:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.8 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 23:27 | RS1 | TAL SAC |

## Client Sample ID: PWS1159-OS-042421-100
**Lab Sample ID: 320-72888-100**
**Date Collected: 04/24/21 10:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 289.3 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/04/21 23:55 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD02-042421
**Lab Sample ID: 320-72888-102**
**Date Collected: 04/24/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 288.5 mL | 10.00 mL | 485554 | 05/03/21 19:37 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 485843 | 05/05/21 00:05 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1133-OS-042421-100
**Lab Sample ID: 320-72888-103**
**Date Collected: 04/24/21 11:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.6 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:04 | K1S | TAL SAC |

## Client Sample ID: PWS1116-OS-042421-100
**Lab Sample ID: 320-72888-105**
**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.1 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:13 | K1S | TAL SAC |

## Client Sample ID: PWS1175-OS-042421-100
**Lab Sample ID: 320-72888-107**
**Date Collected: 04/24/21 13:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.4 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:22 | K1S | TAL SAC |

## Client Sample ID: PWS1143-OS-042421-100
**Lab Sample ID: 320-72888-109**
**Date Collected: 04/24/21 14:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.3 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:32 | K1S | TAL SAC |

## Client Sample ID: PWS1162-OS-042421-100
**Lab Sample ID: 320-72888-111**
**Date Collected: 04/24/21 15:30**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.3 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:41 | K1S | TAL SAC |

## Client Sample ID: PWS1156-OS-042421-100
**Lab Sample ID: 320-72888-113**
**Date Collected: 04/24/21 16:55**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.7 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 13:50 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1053-OS-042521-100
## Lab Sample ID: 320-72888-115
**Date Collected: 04/25/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 299.8 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 14:27 | K1S | TAL SAC |

## Client Sample ID: PWS1077-OS-042521-100
## Lab Sample ID: 320-72888-117
**Date Collected: 04/25/21 09:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.3 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 14:54 | K1S | TAL SAC |

## Client Sample ID: PWS-FD01-042521
## Lab Sample ID: 320-72888-119
**Date Collected: 04/25/21 12:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 288 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:03 | K1S | TAL SAC |

## Client Sample ID: PWS1083-OS-042521-100
## Lab Sample ID: 320-72888-120
**Date Collected: 04/25/21 10:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.5 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:12 | K1S | TAL SAC |

## Client Sample ID: PWS1046-OS-042521-100
## Lab Sample ID: 320-72888-122
**Date Collected: 04/25/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 300.4 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:21 | K1S | TAL SAC |

## Client Sample ID: PWS1081-OS-042521-100
## Lab Sample ID: 320-72888-124
**Date Collected: 04/25/21 12:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.6 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:31 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1029-OS-042521-100
**Lab Sample ID: 320-72888-126**
**Date Collected: 04/25/21 14:40**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 292.2 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:40 | K1S | TAL SAC |

## Client Sample ID: PWS1144-OS-042521-100
**Lab Sample ID: 320-72888-130**
**Date Collected: 04/25/21 09:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.3 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 15:49 | K1S | TAL SAC |

## Client Sample ID: PWS1165-OS-042521-100
**Lab Sample ID: 320-72888-132**
**Date Collected: 04/25/21 11:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275.3 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 16:27 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-042521
**Lab Sample ID: 320-72888-134**
**Date Collected: 04/25/21 12:02**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.4 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 16:36 | K1S | TAL SAC |

## Client Sample ID: PWS1078-OS-042521-100
**Lab Sample ID: 320-72888-137**
**Date Collected: 04/25/21 15:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 268.8 mL | 10.00 mL | 485555 | 05/03/21 19:43 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486301 | 05/05/21 16:45 | K1S | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72888-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-72888-1 | PWS1049-OS-042122-100 | Water | 04/22/21 08:23 | 04/27/21 10:00 | |
| 320-72888-3 | PWS-FD01-042221 | Water | 04/22/21 12:01 | 04/27/21 10:00 | |
| 320-72888-4 | PWS1051-OS-042221-100 | Water | 04/22/21 11:35 | 04/27/21 10:00 | |
| 320-72888-6 | PWS1047-OS-042221-100 | Water | 04/22/21 12:38 | 04/27/21 10:00 | |
| 320-72888-8 | PWS1055-OS-042221-100 | Water | 04/22/21 13:54 | 04/27/21 10:00 | |
| 320-72888-10 | PWS1054-OS-042221-100 | Water | 04/22/21 14:43 | 04/27/21 10:00 | |
| 320-72888-12 | PWS1048-OS-042221-100 | Water | 04/22/21 18:47 | 04/27/21 10:00 | |
| 320-72888-14 | PWS1152-OS-042221-100 | Water | 04/22/21 08:25 | 04/27/21 10:00 | |
| 320-72888-16 | PWS-FD02-042221 | Water | 04/22/21 12:02 | 04/27/21 10:00 | |
| 320-72888-17 | PWS1151-OS-042221-100 | Water | 04/22/21 09:20 | 04/27/21 10:00 | |
| 320-72888-19 | PWS1139-OS-042221-100 | Water | 04/22/21 10:35 | 04/27/21 10:00 | |
| 320-72888-21 | PWS1146-OS-042221-100 | Water | 04/22/21 11:45 | 04/27/21 10:00 | |
| 320-72888-23 | PWS1138-OS-042221-100 | Water | 04/22/21 12:35 | 04/27/21 10:00 | |
| 320-72888-25 | PWS1120-OS-042221-100 | Water | 04/22/21 13:35 | 04/27/21 10:00 | |
| 320-72888-27 | PWS1122-OS-042221-100 | Water | 04/22/21 14:40 | 04/27/21 10:00 | |
| 320-72888-29 | PWS1119-OS-042221-100 | Water | 04/22/21 15:30 | 04/27/21 10:00 | |
| 320-72888-31 | PWS1173-OS-042221-100 | Water | 04/22/21 16:30 | 04/27/21 10:00 | |
| 320-72888-33 | PWS1030-OS-042321-100 | Water | 04/23/21 08:40 | 04/27/21 10:00 | |
| 320-72888-35 | PWS-FD01-042321 | Water | 04/23/21 12:01 | 04/27/21 10:00 | |
| 320-72888-36 | PWS1016-OS-042122-100 | Water | 04/23/21 09:40 | 04/27/21 10:00 | |
| 320-72888-38 | PWS1037-OS-042321-100 | Water | 04/23/21 10:25 | 04/27/21 10:00 | |
| 320-72888-40 | PWS1041-OS-042321-100 | Water | 04/23/21 11:30 | 04/27/21 10:00 | |
| 320-72888-42 | PWS1045-OS-042321-100 | Water | 04/23/21 12:45 | 04/27/21 10:00 | |
| 320-72888-44 | PWS1057-OS-042321-100 | Water | 04/23/21 13:25 | 04/27/21 10:00 | |
| 320-72888-46 | PWS1056-OS-042321-100 | Water | 04/23/21 14:45 | 04/27/21 10:00 | |
| 320-72888-48 | PWS1058-OS-042321-100 | Water | 04/23/21 15:40 | 04/27/21 10:00 | |
| 320-72888-50 | PWS1061-OS-042321-100 | Water | 04/23/21 16:35 | 04/27/21 10:00 | |
| 320-72888-52 | PWS1060-OS-042321-100 | Water | 04/23/21 17:10 | 04/27/21 10:00 | |
| 320-72888-54 | PWS1039-OS-042321-100 | Water | 04/23/21 19:05 | 04/27/21 10:00 | |
| 320-72888-56 | PWS1176-OS-042321-100 | Water | 04/23/21 08:40 | 04/27/21 10:00 | |
| 320-72888-58 | PWS1142-OS-042321-100 | Water | 04/23/21 09:40 | 04/27/21 10:00 | |
| 320-72888-60 | PWS-FD02-042321 | Water | 04/23/21 12:02 | 04/27/21 10:00 | |
| 320-72888-61 | PWS1137-OS-042321-100 | Water | 04/23/21 10:20 | 04/27/21 10:00 | |
| 320-72888-63 | PWS1131-OS-042321-100 | Water | 04/23/21 11:15 | 04/27/21 10:00 | |
| 320-72888-65 | PWS1126-OS-042321-100 | Water | 04/23/21 12:30 | 04/27/21 10:00 | |
| 320-72888-67 | PWS1123-OS-042321-100 | Water | 04/23/21 13:10 | 04/27/21 10:00 | |
| 320-72888-69 | PWS1117-OS-042321-100 | Water | 04/23/21 14:25 | 04/27/21 10:00 | |
| 320-72888-71 | PWS1107-OS-042321-100 | Water | 04/23/21 15:15 | 04/27/21 10:00 | |
| 320-72888-73 | PWS1062-OS-042421-100 | Water | 04/24/21 08:45 | 04/27/21 10:00 | |
| 320-72888-75 | PWS1064-OS-042421-100 | Water | 04/24/21 09:30 | 04/27/21 10:00 | |
| 320-72888-77 | PWS-FD01-042421 | Water | 04/24/21 12:01 | 04/27/21 10:00 | |
| 320-72888-78 | PWS1067-OS-042421-100 | Water | 04/24/21 10:15 | 04/27/21 10:00 | |
| 320-72888-80 | PWS1069-OS-042421-100 | Water | 04/24/21 11:35 | 04/27/21 10:00 | |
| 320-72888-82 | PWS1059-OS-042421-100 | Water | 04/24/21 12:35 | 04/27/21 10:00 | |
| 320-72888-84 | PWS1068-OS-042421-100 | Water | 04/24/21 13:35 | 04/27/21 10:00 | |
| 320-72888-86 | PWS1072-OS-042421-100 | Water | 04/24/21 14:15 | 04/27/21 10:00 | |
| 320-72888-88 | PWS1074-IS-042421-100 | Water | 04/24/21 15:50 | 04/27/21 10:00 | |
| 320-72888-90 | PWS1065-OS-042421-100 | Water | 04/24/21 16:30 | 04/27/21 10:00 | |
| 320-72888-92 | PWS1075-OS-042421-100 | Water | 04/24/21 17:50 | 04/27/21 10:00 | |
| 320-72888-94 | PWS1079-OS-042421-100 | Water | 04/24/21 18:30 | 04/27/21 10:00 | |
| 320-72888-96 | PWS1108-OS-042421-100 | Water | 04/24/21 08:50 | 04/27/21 10:00 | |
| 320-72888-98 | PWS1109-OS-042421-100 | Water | 04/24/21 09:25 | 04/27/21 10:00 | |
| 320-72888-100 | PWS1159-OS-042421-100 | Water | 04/24/21 10:05 | 04/27/21 10:00 | |

# Sample Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72888-1
Project/Site: WDNR - Campbell PW Sampling

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-72888-102 | PWS-FD02-042421 | Water | 04/24/21 12:02 | 04/27/21 10:00 | |
| 320-72888-103 | PWS1133-OS-042421-100 | Water | 04/24/21 11:15 | 04/27/21 10:00 | |
| 320-72888-105 | PWS1116-OS-042421-100 | Water | 04/24/21 12:05 | 04/27/21 10:00 | |
| 320-72888-107 | PWS1175-OS-042421-100 | Water | 04/24/21 13:50 | 04/27/21 10:00 | |
| 320-72888-109 | PWS1143-OS-042421-100 | Water | 04/24/21 14:25 | 04/27/21 10:00 | |
| 320-72888-111 | PWS1162-OS-042421-100 | Water | 04/24/21 15:30 | 04/27/21 10:00 | |
| 320-72888-113 | PWS1156-OS-042421-100 | Water | 04/24/21 16:55 | 04/27/21 10:00 | |
| 320-72888-115 | PWS1053-OS-042521-100 | Water | 04/25/21 09:00 | 04/27/21 10:00 | |
| 320-72888-117 | PWS1077-OS-042521-100 | Water | 04/25/21 09:35 | 04/27/21 10:00 | |
| 320-72888-119 | PWS-FD01-042521 | Water | 04/25/21 12:01 | 04/27/21 10:00 | |
| 320-72888-120 | PWS1083-OS-042521-100 | Water | 04/25/21 10:25 | 04/27/21 10:00 | |
| 320-72888-122 | PWS1046-OS-042521-100 | Water | 04/25/21 11:35 | 04/27/21 10:00 | |
| 320-72888-124 | PWS1081-OS-042521-100 | Water | 04/25/21 12:40 | 04/27/21 10:00 | |
| 320-72888-126 | PWS1029-OS-042521-100 | Water | 04/25/21 14:40 | 04/27/21 10:00 | |
| 320-72888-130 | PWS1144-OS-042521-100 | Water | 04/25/21 09:50 | 04/27/21 10:00 | |
| 320-72888-132 | PWS1165-OS-042521-100 | Water | 04/25/21 11:35 | 04/27/21 10:00 | |
| 320-72888-134 | PWS-FD02-042521 | Water | 04/25/21 12:02 | 04/27/21 10:00 | |
| 320-72888-137 | PWS1078-OS-042521-100 | Water | 04/25/21 15:25 | 04/27/21 10:00 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.010 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

320-72888 Chain of Custody

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1049-OS-042122-100 | 4/22/21 | 823 | G | Water | N | N | X | 2 | |
| PWS1049-OS-042122-200 | 4/22/21 | 801 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042221 | 4/22/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1051-OS-042221-100 | 4/22/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1051-OS-042221-200 | 4/22/21 | 1109 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1047-OS-042221-100 | 4/22/21 | 1238 | G | Water | N | N | X | 2 | |
| PWS1047-OS-042221-200 | 4/22/21 | 1158 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1055-OS-042221-100 | 4/22/21 | 1354 | G | Water | N | N | X | 2 | |
| PWS1055-OS-042221-200 | 4/22/21 | 1323 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1054-OS-042221-100 | 4/22/21 | 1443 | G | Water | N | N | X | 2 | |
| PWS1054-OS-042221-200 | 4/22/21 | 1408 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/26/21@2000 | Wood | | 4-27-21/10:00 | ASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840
165844, 165843, 165841, 165842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 2.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.011 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested | Preservation Codes: |
|---|---|---|---|
| City: Madsion | TAT Requested (days): 10 | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: WI, 53703 | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | Other: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | |
| Site: Campbell, WI | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1048-OS-042221-100 | 4/22/21 | 1847 | G | Water | N | N | X | 2 | |
| PWS1048-OS-042221-200 | 4/22/21 | 1825 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1152-OS-042221-100 | 4/22/21 | 825 | G | Water | N | N | X | 2 | |
| PWS1152-OS-042221-200 | 4/22/21 | 830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042221 | 4/22/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1151-OS-042221-100 | 4/22/21 | 920 | G | Water | N | N | X | 2 | |
| PWS1151-OS-042221-200 | 4/22/21 | 925 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042221 | 4/22/21 | 920 | G | Water | N | Y | X | 2 | Primary sample is PWS1151-OS-042221-100 |
| PWS-MSD02-042221 | 4/22/21 | 920 | G | Water | N | Y | X | 2 | Primary sample is PWS1151-OS-042221-100 |
| PWS1139-OS-042221-100 | 4/22/21 | 1035 | G | Water | N | N | X | 2 | |
| PWS1139-OS-042221-200 | 4/22/21 | 1040 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kevina Casey | 4/26/21@2000 | Wood | | 4-27-21 10:00 | ETA SAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1645835, 1645836, 1645839, 1645840 | Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4 |
|---|---|---|
| | NC 4-21-21 1645843, 1645844, 1645841, 1645842, 1598279, 1598278 | |

Ver: 01/16/2019

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5/10/2021 (Rev. 1)

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.012 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1146-OS-042221-100 | 4/22/21 | 1145 | G | Water | N | N | X | 2 | |
| PWS1146-OS-042221-200 | 4/22/21 | 1150 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1138-OS-042221-100 | 4/22/21 | 1235 | G | Water | N | N | X | 2 | |
| PWS1138-OS-042221-200 | 4/22/21 | 1240 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1120-OS-042221-100 | 4/22/21 | 1335 | G | Water | N | N | X | 2 | |
| PWS1120-OS-042221-200 | 4/22/21 | 1339 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1122-OS-042221-100 | 4/22/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1122-OS-042221-200 | 4/22/21 | 1445 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1119-OS-042221-100 | 4/22/21 | 1530 | G | Water | N | N | X | 2 | |
| PWS1119-OS-042221-200 | 4/22/21 | 1535 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1173-OS-042221-100 | 4/22/21 | 1630 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/26/20@2000 | Wood | | 4-27-21 10:00 | EFASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 1645835, 1645836, 1645839, 1645840
# 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.013 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested | Preservation Codes: |
|---|---|---|---|
| City: Madsion | TAT Requested (days): 10 | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: WI, 53703 | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | Other: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | |
| Site: Campbell, WI | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1173-OS-042221-200 | 4/22/21 | 1635 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1030-OS-042321-100 | 4/23/21 | 840 | G | Water | N | N | X | 2 | |
| PWS1030-OS-042321-200 | 4/23/21 | 805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042321 | 4/23/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1016-OS-042321-100 | 4/23/21 | 940 | G | Water | N | N | X | 2 | |
| PWS1016-OS-042321-200 | 4/23/21 | 900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042321 | 4/23/21 | 940 | G | Water | N | Y | X | 2 | Primary sample is PWS1016-OS-042321-100 |
| PWS-MSD01-042321 | 4/23/21 | 940 | G | Water | N | Y | X | 2 | Primary sample is PWS1016-OS-042321-100 |
| PWS1037-OS-042321-100 | 4/23/21 | 1025 | G | Water | N | N | X | 2 | |
| PWS1037-OS-042321-200 | 4/23/21 | 1000 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1041-OS-042321-100 | 4/23/21 | 1130 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Martina Casey | Date/Time: 4-26-21 @ 2000 | Company: Wood | Received by: [signature] | Date/Time: 4-27-21 10:00 | Company: ETASAL |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 645835, 645836, 645839, 645840, 645844, 645843, 645841, 645842, 598279, 598278
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.014 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1041-OS-042321-200 | 4/23/21 | 1100 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1045-OS-042321-100 | 4/23/21 | 1245 | G | Water | N | N | X | 2 | |
| PWS1045-OS-042321-200 | 4/23/21 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1057-OS-042321-100 | 4/23/21 | 1325 | G | Water | N | N | X | 2 | |
| PWS1057-OS-042321-200 | 4/23/21 | 1305 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1056-OS-042321-100 | 4/23/21 | 1445 | G | Water | N | N | X | 2 | |
| PWS1056-OS-042321-200 | 4/23/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1058-OS-042321-100 | 4/23/21 | 1540 | G | Water | N | N | X | 2 | |
| PWS1058-OS-042321-200 | 4/23/21 | 1515 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1061-OS-042321-100 | 4/23/21 | 1635 | G | Water | N | N | X | 2 | |
| PWS1061-OS-042321-200 | 4/23/21 | 1605 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/26/21 @2000 | Wood | | 4-27-21 / 10:00 | EMSAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645835 / 1645836, 1645839, 1645840, 1645843, 1645844, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.1, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.015 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1060-OS-042321-100 | 4/23/21 | 1710 | G | Water | N | N | X | 2 | |
| PWS1060-OS-042321-200 | 4/23/21 | 1650 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1039-IS-042321-100 | 4/23/21 | 1905 | G | Water | N | N | X | 2 | |
| PWS1039-IS-042321-200 | 4/23/21 | 1830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1176-IS-042321-100 | 4/23/21 | 840 | G | Water | N | N | X | 2 | |
| PWS1176-IS-042321-200 | 4/23/21 | 845 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1142-OS-042321-100 | 4/23/21 | 940 | G | Water | N | N | X | 2 | |
| PWS1142-OS-042321-200 | 4/23/21 | 945 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042321 | 4/23/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1137-OS-042321-100 | 4/23/21 | 1020 | G | Water | N | N | X | 2 | |
| PWS1137-OS-042321-200 | 4/23/21 | 1025 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/26/21 @ 2000 | Wood | | 4-27-21 10:00 | ETA SAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|
| Yes | 1645835, 1645836, 1645839, 1645840 1645844, 1645843, 1645841, 1645842, 1598279, 1598278 | 1.4, 1.7, 0.6, 1.0, 0.4 |

Ver: 01/16/2019



5/10/2021 (Rev. 1)

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.016 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1131-OS-042321-100 | 4/23/21 | 1115 | G | Water | N | N | X | 2 | |
| PWS1131-OS-042321-200 | 4/23/21 | 1120 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1126-OS-042321-100 | 4/23/21 | 1230 | G | Water | N | N | X | 2 | |
| PWS1126-OS-042321-200 | 4/23/21 | 1235 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1123-OS-042321-100 | 4/23/21 | 1310 | G | Water | N | N | X | 2 | |
| PWS1123-OS-042321-200 | 4/23/21 | 1315 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1117-OS-042321-100 | 4/23/21 | 1425 | G | Water | N | N | X | 2 | |
| PWS1117-OS-042321-200 | 4/23/21 | 1430 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1107-OS-042321-100 | 4/23/21 | 1515 | G | Water | N | N | X | 2 | |
| PWS1107-OS-042321-200 | 4/23/21 | 1520 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1062-OS-042421-100 | 4/24/21 | 845 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Lemma Casey | 4/26/21 @2000 | Wood | | 4-27-21 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.017 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 8 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1062-OS-042421-200 | 4/24/21 | 820 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042421 | 4/24/21 | 845 | G | Water | N | Y | X | 2 | Primary sample is PWS1062-OS-042421-100 |
| PWS-MSD01-042421 | 4/24/21 | 845 | G | Water | N | Y | X | 2 | Primary sample is PWS1062-OS-042421-100 |
| PWS1064-OS-042421-100 | 4/24/21 | 930 | G | Water | N | N | X | 2 | |
| PWS1064-OS-042421-200 | 4/24/21 | 900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042421 | 4/24/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1067-OS-042421-100 | 4/24/21 | 1015 | G | Water | N | N | X | 2 | |
| PWS1067-OS-042421-200 | 4/24/21 | 950 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1069-OS-042421-100 | 4/24/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1069-OS-042421-200 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1059-OS-042421-100 | 4/24/21 | 1235 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Marina Casey | 4-26-21@2000 | Wood | | 4-27-21 / 10:00 | ETAS AC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645841, 1645842, ~~1645838~~, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

NC 4-27-21

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.018 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (Wewater, S=solid, O=wasteloil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1059-OS-042421-200 | 4/24/21 | 1205 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1068-OS-042421-100 | 4/24/21 | 1335 | G | Water | N | N | X | 2 | |
| PWS1068-OS-042421-200 | 4/24/21 | 1310 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1072-OS-042421-100 | 4/24/21 | 1415 | G | Water | N | N | X | 2 | |
| PWS1072-OS-042421-200 | 4/24/21 | 1350 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1074-IS-042421-100 | 4/24/21 | 1550 | G | Water | N | N | X | 2 | |
| PWS1074-IS-042421-200 | 4/24/21 | 1525 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1065-OS-042421-100 | 4/24/21 | 1630 | G | Water | N | N | X | 2 | |
| PWS1065-OS-042421-200 | 4/24/21 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1075-IS-042421-100 | 4/24/21 | 1750 | G | Water | N | N | X | 2 | |
| PWS1075-IS-042421-200 | 4/24/21 | 1718 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kendra Casey | 4/26/21@2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.019 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 10 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1079-OS-042421-100 | 4/24/21 | 1830 | G | Water | N | N | X | 2 | |
| PWS1079-OS-042421-200 | 4/24/21 | 1810 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1108-OS-042421-100 | 4/24/21 | 850 | G | Water | N | N | X | 2 | |
| PWS1108-OS-042421-200 | 4/24/21 | 855 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1109-OS-042421-100 | 4/24/21 | 925 | G | Water | N | N | X | 2 | |
| PWS1109-OS-042421-200 | 4/24/21 | 930 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042421 | 4/24/21 | 925 | G | Water | N | Y | X | 2 | Primary sample is PWS1109-OS-042421-100 |
| PWS-MSD02-042421 | 4/24/21 | 925 | G | Water | N | Y | X | 2 | Primary sample is PWS1109-OS-042421-100 |
| PWS1159-OS-042421-100 | 4/24/21 | 1005 | G | Water | N | N | X | 2 | |
| PWS1159-OS-042421-200 | 4/24/21 | 1010 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042421 | 4/24/21 | 1202 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kevina Casey | 4/26/2021 2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: ~~1643~~ 1645835, 1645836, 1645839, 1645842 NC 4-27-21 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 2.6, 1.0, 0.4

Ver: 01/16/2019

* Time List 1202.

Page 203 of 208

5/10/2021 (Rev. 1)

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.020 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 11 of 14 |
| Company: Wood E&I Solutions Inc | | Analysis Requested | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1133-OS-042421-100 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | |
| PWS1133-OS-042421-200 | 4/24/21 | 1120 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1116-OS-042421-100 | 4/24/21 | 1205 | G | Water | N | N | X | 2 | |
| PWS1116-OS-042421-200 | 4/24/21 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1175-OS-042421-100 | 4/24/21 | 1350 | G | Water | N | N | X | 2 | |
| PWS1175-OS-042421-200 | 4/24/21 | 1355 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1143-OS-042421-100 | 4/24/21 | 1425 | G | Water | N | N | X | 2 | |
| PWS1143-OS-042421-200 | 4/24/21 | 1430 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1162-OS-042421-100 | 4/24/21 | 1530 | G | Water | N | N | X | 2 | |
| PWS1162-OS-042421-200 | 4/24/21 | 1535 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1156-OS-042421-100 | 4/24/21 | 1655 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| | | | |
|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
| Relinquished by: Karina Casey | Date/Time: 4-26-21@2000 | Company: Wood | Received by: | Date/Time: 4-27-21/10:00 | Company: ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645847, 1645845, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.021 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 12 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1156-OS-042421-200 | 4/24/21 | 1700 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1053-OS-042521-100 | 4/25/21 | 900 | G | Water | N | N | X | 2 | |
| PWS1053-OS-042521-200 | 4/25/21 | 825 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042521 | 4/25/21 | 900 | G | Water | N | Y | X | 2 | Primary is PWS1053-OS-042521-100 |
| PWS-MSD01-042521 | 4/25/21 | 900 | G | Water | N | Y | X | 2 | Primary is PWS1053-OS-042521-100 |
| PWS1077-OS-042521-100 | 4/25/21 | 935 | G | Water | N | N | X | 2 | |
| PWS1077-OS-042521-200 | 4/25/21 | 910 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042521 | 4/25/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1083-OS-042521-100 | 4/25/21 | 1025 | G | Water | N | N | X | 2 | |
| PWS1083-OS-042521-200 | 4/25/21 | 955 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1046-OS-042521-100 | 4/25/21 | 1135 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kevin Ena Casey | 4-26-21@2000 | Wood | | 4/27/21 \| 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 164583S, 1645833, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.022 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 13 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1046-OS-042521-200 | 4/25/21 | 1110 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1081-OS-042521-100 | 4/25/21 | 1240 | G | Water | N | N | X | 2 | |
| PWS1081-OS-042521-200 | 4/25/21 | 1220 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1029-OS-042521-100 | 4/25/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1029-OS-042521-200 | 4/25/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1078-OS-042521-100 | 4/25/21 | 1505 | G | Water | N | N | X | 2 | |
| PWS1078-OS-042521-200 | 4/25/21 | 1525 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1144-OS-042521-100 | 4/25/21 | 950 | G | Water | N | N | X | 2 | |
| PWS1144-OS-042521-200 | 4/25/21 | 955 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1165-OS-042521-100 | 4/25/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1165-OS-042521-200 | 4/25/21 | 1140 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Katrina Casey | 4-26-21@2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: NC4-27-21 1645835, 1645836, 1645839, 1645840, 1645844 ~~1645835~~, 1645843, 1645841, 1645842, 1598278 ~~1598278~~
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4
Time lot at 1444. DW Ellen lot

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.023 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 14 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS-FD02-042521 | 4/25/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS-1069-OS-042421-100 | 4/24/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS-1069-OS-042421-200 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-1078-OS-042521-100 | 4/25/21 | 1525 | G | Water | N | N | X | 2 | |
| PWS-1078-OS-042521-200 | 4/25/21 | 1505 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-26-21@2000 | Wood | | 04-27-21 / 10:00 | ETAS AC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ∆ Yes ∆ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72888-1

**Login Number: 72888**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | False | Refer to Job Narrative for details. |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | False | Refer to Job Narrative for details. |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73077-1
Client Project/Site: WDNR - Campbell PW Sampling
Revision: 1

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/13/2021 2:20:44 PM*

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LINKS

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Job ID: 320-73077-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73077-1**

**Receipt**
The samples were received on 4/30/2021 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 0.6º C, 1.0º C, 1.0º C, 1.1º C, 1.1º C, 1.3º C, 1.4º C and 2.0º C.

**LCMS**
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte:

Method 537 (modified): The method blank for preparation batch 320-485967 contained Perfluorooctanesulfonamide (FOSA) and NEtFOSE above half the reporting limit (RL). None of the following samples associated with this method blank contained the target compound; therefore, re-extraction of samples was not performed: PWS1096-OS-042721-100 (320-73077-40), PWS1090-OS-042721-100 (320-73077-42), PWS1098-OS-042721-100 (320-73077-44), PWS1093-OS-042721-100 (320-73077-46), PWS1094-OS-042721-100 (320-73077-48), PWS1129-OS-042821-100 (320-73077-52), PWS-FD01-042821 (320-73077-54), PWS1115-OS-042821-100 (320-73077-55), PWS1001-OS-042821-100 (320-73077-57), PWS1182-OS-042821-100 (320-73077-59), PWS1141-OS-042821-100 (320-73077-61), PWS1050-OS-042821-100 (320-73077-63), PWS1095-IS-042821-100 (320-73077-65), PWS1111-OS-042821-100 (320-73077-67) and (MB 320-485967/1-A).

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-485967.

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-487960.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

## Client Sample ID: PWS1132-OS-042621-100 — Lab Sample ID: 320-73077-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.3 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.5 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 6.6 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 4.3 | | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 12 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.5 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.47 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 15 | B | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1105-OS-042621-100 — Lab Sample ID: 320-73077-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042621 — Lab Sample ID: 320-73077-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1182-OS-042621-100 — Lab Sample ID: 320-73077-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.93 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.7 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 14 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.26 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.6 | B | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1200-OS-042621-100 — Lab Sample ID: 320-73077-8

No Detections.

## Client Sample ID: PWS1104-OS-042621-100 — Lab Sample ID: 320-73077-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.3 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.90 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1167-OS-042621-100 — Lab Sample ID: 320-73077-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanoic acid (PFPeA) | 2.5 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.5 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1167-OS-042621-100 (Continued) — Lab Sample ID: 320-73077-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanoic acid (PFHpA) | 2.2 | | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.4 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.49 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.4 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.7 | J I B | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 5.4 | | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1097-OS-042621-100 — Lab Sample ID: 320-73077-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.70 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.88 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.2 | J B | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.1 | | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1005-OS-042721-100 — Lab Sample ID: 320-73077-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.54 | J I | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.6 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.44 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.54 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.9 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.37 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.3 | B | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042721 — Lab Sample ID: 320-73077-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 15 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.55 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.6 | J | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.42 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.51 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.30 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.4 | B | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.98 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1080-IS-042721-100 — Lab Sample ID: 320-73077-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.6 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.54 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.83 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1080-IS-042721-100 (Continued) — Lab Sample ID: 320-73077-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.7 | J B | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1052-OS-042721-100 — Lab Sample ID: 320-73077-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 36 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.90 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.3 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.41 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 13 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.26 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.29 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.81 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.5 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 16 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1042-OS-042721-100 — Lab Sample ID: 320-73077-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 16 | | 4.3 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.48 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.0 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.29 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.7 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.24 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.5 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.92 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.8 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.17 | J I | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 13 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.6 | | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1071-IS-042721-100 — Lab Sample ID: 320-73077-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.7 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.53 | J | 1.6 | 0.40 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.83 | J | 1.6 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.75 | J | 1.6 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.7 | | 1.6 | 0.69 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.4 | | 1.6 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 4.7 | | 1.6 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 7.0 | | 1.6 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1071-IS-042721-100 (Continued) — Lab Sample ID: 320-73077-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.27 | J | 1.6 | 0.15 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.6 | | 1.6 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.7 | | 1.6 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1010-IS-042721-100 — Lab Sample ID: 320-73077-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.3 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.84 | J | 1.6 | 0.69 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.53 | J | 1.6 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.59 | J | 1.6 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.7 | | 1.6 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.81 | J | 1.6 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.1 | | 1.6 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1066-OS-042721-100 — Lab Sample ID: 320-73077-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 89 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.0 | | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.9 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.56 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 27 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.29 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.3 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.9 | | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.8 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.33 | J I | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 15 | | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.1 | | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1091-OS-042721-100 — Lab Sample ID: 320-73077-31

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.8 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.5 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.2 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.7 | | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.30 | J | 1.7 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.37 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.2 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J I | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042721 — Lab Sample ID: 320-73077-33

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.9 | | 4.5 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS-FD02-042721 (Continued) — Lab Sample ID: 320-73077-33

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.2 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.7 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.8 | 0.76 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.44 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J I | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.7 | | 1.8 | 0.88 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1187-OS-042721-100 — Lab Sample ID: 320-73077-34

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.0 | J | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.93 | J | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.60 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.6 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.7 | I | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.91 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | I | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.4 | J | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1086-OS-042721-100 — Lab Sample ID: 320-73077-36

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.7 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 5.5 | | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 4.6 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.3 | | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.2 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.2 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.36 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.1 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | I | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.5 | | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1099-OS-042721-100 — Lab Sample ID: 320-73077-38

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 10 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.7 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.3 | J | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 4.0 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.59 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.9 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.1 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.2 | | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

## Client Sample ID: PWS1096-OS-042721-100 — Lab Sample ID: 320-73077-40

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanoic acid (PFOA) | 0.84 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.5 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.4 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.6 | I | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1090-OS-042721-100 — Lab Sample ID: 320-73077-42

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.8 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.2 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.0 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.63 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.0 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.7 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.0 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 7.0 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.0 | I | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1098-OS-042721-100 — Lab Sample ID: 320-73077-44

No Detections.

## Client Sample ID: PWS1093-OS-042721-100 — Lab Sample ID: 320-73077-46

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 9.6 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.5 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.0 | | 1.8 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.95 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.4 | | 1.8 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.0 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.75 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.4 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1094-OS-042721-100 — Lab Sample ID: 320-73077-48

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.9 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.3 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 12 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.2 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1121-OS-042721-100 — Lab Sample ID: 320-73077-50

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.0 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.4 | J | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1121-OS-042721-100 (Continued) — Lab Sample ID: 320-73077-50

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 1.9 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.2 | | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 7.8 | | 1.8 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.3 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.51 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 6.4 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.36 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 10 | I | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.9 | | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1129-OS-042821-100 — Lab Sample ID: 320-73077-52

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.3 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.5 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.6 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.7 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.2 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.84 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042821 — Lab Sample ID: 320-73077-54

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.3 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.8 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.59 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.2 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.77 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.0 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1115-OS-042821-100 — Lab Sample ID: 320-73077-55

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.2 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.0 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.3 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.96 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 8.2 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1001-OS-042821-100 — Lab Sample ID: 320-73077-57

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.0 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1001-OS-042821-100 (Continued) — Lab Sample ID: 320-73077-57

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.99 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.87 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.60 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1082-OS-042821-100 — Lab Sample ID: 320-73077-59

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.0 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.0 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1141-OS-042821-100 — Lab Sample ID: 320-73077-61

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.44 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.2 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | I | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1050-OS-042821-100 — Lab Sample ID: 320-73077-63

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 56 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 5.2 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 3.9 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.97 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 21 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.0 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.3 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.1 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1095-IS-042821-100 — Lab Sample ID: 320-73077-65

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.39 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.2 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.76 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1111-OS-042821-100 — Lab Sample ID: 320-73077-67

No Detections.

## Client Sample ID: PWS1085-OS-042821-100 — Lab Sample ID: 320-73077-69

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.4 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.71 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.33 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.35 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.59 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.63 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1085-OS-042821-100 (Continued) — Lab Sample ID: 320-73077-69

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.29 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.85 | J I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanesulfonic acid (PFDS) | 0.34 | J | 1.9 | 0.30 | ng/L | 1 | | 537 (modified) | Total/NA |
| NMeFOSA | 0.42 | J I | 1.9 | 0.40 | ng/L | 1 | | 537 (modified) | Total/NA |
| 4:2 FTS | 0.38 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| F-53B Major | 0.37 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1118-OS-042821-100 — Lab Sample ID: 320-73077-71

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.7 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.89 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.2 | J | 1.9 | 0.56 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.68 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.37 | J | 1.9 | 0.30 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.77 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.9 | | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-042821 — Lab Sample ID: 320-73077-73

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.9 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.95 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.67 | J | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.0 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.67 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.8 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1084-OS-042821-100 — Lab Sample ID: 320-73077-74

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.0 | J | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.4 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 9.9 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 5.5 | | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 15 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.68 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.1 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | I | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1164-IS-042821-100 — Lab Sample ID: 320-73077-76

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 14 | | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.8 | | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 7.6 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.7 | | 1.9 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1164-IS-042821-100 (Continued) — Lab Sample ID: 320-73077-76

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 9.1 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 4.4 | | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 8.0 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1199-IS-042821-100 — Lab Sample ID: 320-73077-78

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 7.9 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 6.7 | | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 15 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.85 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1150-OS-042821-100 — Lab Sample ID: 320-73077-80

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.24 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.72 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.9 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1158-OS-042821-100 — Lab Sample ID: 320-73077-82

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.78 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.89 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.0 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1177-OS-042821-100 — Lab Sample ID: 320-73077-84

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.6 | J | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.2 | | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.6 | J | 1.9 | 0.56 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.80 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.32 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.9 | I | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1178-OS-042821-100 — Lab Sample ID: 320-73077-86

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 11 | | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.3 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.52 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 100 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1178-OS-042821-100 (Continued) — Lab Sample ID: 320-73077-86

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 0.38 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.5 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1102-OS-042821-100 — Lab Sample ID: 320-73077-88

No Detections.

## Client Sample ID: PWS1186-IS-042821-100 — Lab Sample ID: 320-73077-90

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.7 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.6 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.9 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1132-OS-042621-100**
**Date Collected: 04/26/21 09:45**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-1**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.3** | | 4.7 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.5** | | 1.9 | 0.46 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **6.6** | | 1.9 | 0.55 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **4.3** | | 1.9 | 0.24 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **12** | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.1** | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.1** | **J** | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.5** | | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.47** | **J** | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **15** | **B** | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.9 | 0.93 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/04/21 04:30 | 05/06/21 01:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *73* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:18* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:18* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:18* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:18* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:18* | *1* |

## Client Sample ID: PWS1132-OS-042621-100
**Lab Sample ID: 320-73077-1**

**Date Collected: 04/26/21 09:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 PFDA | 80 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 PFUnA | 95 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 PFDoA | 91 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 PFTeDA | 82 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 PFHxDA | 81 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C3 PFBS | 76 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 18O2 PFHxS | 74 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C4 PFOS | 76 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C8 FOSA | 81 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| M2-4:2 FTS | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| M2-6:2 FTS | 92 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C2 10:2 FTS | 73 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d3-NMeFOSAA | 69 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d5-NEtFOSAA | 79 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d-N-EtFOSA-M | 65 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d7-N-MeFOSE-M | 92 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:18 | 1 |

## Client Sample ID: PWS1105-OS-042621-100
**Lab Sample ID: 320-73077-3**

**Date Collected: 04/26/21 10:40**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.52 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1105-OS-042621-100**
**Lab Sample ID: 320-73077-3**
**Date Collected: 04/26/21 10:40**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.8 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 01:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFUnA* | *90* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFDoA* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFTeDA* | *81* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *18O2 PFHxS* | *80* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C4 PFOS* | *76* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C8 FOSA* | *86* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *M2-4:2 FTS* | *70* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *M2-6:2 FTS* | *73* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *M2-8:2 FTS* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C2 10:2 FTS* | *70* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d5-NEtFOSAA* | *81* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d-N-MeFOSA-M* | *71* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 01:46* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS-FD02-042621**
**Date Collected: 04/26/21 12:02**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-5**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.9 | 0.91 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 01:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C5 PFNA* | *105* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:55* | *1* |

## Client Sample ID: PWS-FD02-042621
**Lab Sample ID: 320-73077-5**

**Date Collected: 04/26/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 105 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C2 PFDoA | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C2 PFTeDA | 95 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C2 PFHxDA | 102 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 18O2 PFHxS | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| M2-4:2 FTS | 81 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| M2-6:2 FTS | 87 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| M2-8:2 FTS | 98 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C2 10:2 FTS | 83 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| 13C3 HFPO-DA | 96 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d3-NMeFOSAA | 85 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d5-NEtFOSAA | 91 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d-N-MeFOSA-M | 80 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d-N-EtFOSA-M | 71 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d7-N-MeFOSE-M | 111 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |
| d9-N-EtFOSE-M | 99 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:55 | 1 |

## Client Sample ID: PWS1182-OS-042621-100
**Lab Sample ID: 320-73077-6**

**Date Collected: 04/26/21 12:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.93** | **J** | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.1** | | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.7** | **J** | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **14** | | 1.8 | 0.52 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.26** | **J** | 1.8 | 0.17 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.6** | **B** | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1182-OS-042621-100**
**Lab Sample ID: 320-73077-6**
**Date Collected: 04/26/21 12:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 02:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *78* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFDoA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFTeDA* | *82* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 PFHxDA* | *90* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C8 FOSA* | *88* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *M2-4:2 FTS* | *129* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *M2-6:2 FTS* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *M2-8:2 FTS* | *107* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C2 10:2 FTS* | *84* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d3-NMeFOSAA* | *64* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d5-NEtFOSAA* | *68* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |
| *d9-N-EtFOSE-M* | *91* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:04* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1200-OS-042621-100**
**Lab Sample ID: 320-73077-8**
**Date Collected: 04/26/21 13:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 02:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |
| *13C2 PFUnA* | *101* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:13* | *1* |

## Client Sample ID: PWS1200-OS-042621-100
**Lab Sample ID: 320-73077-8**

**Date Collected: 04/26/21 13:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C2 PFTeDA | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C2 PFHxDA | 91 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 18O2 PFHxS | 80 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C4 PFOS | 83 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C8 FOSA | 88 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| M2-4:2 FTS | 78 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| M2-6:2 FTS | 93 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| M2-8:2 FTS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d3-NMeFOSAA | 68 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d5-NEtFOSAA | 74 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d-N-EtFOSA-M | 70 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |
| d9-N-EtFOSE-M | 91 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 02:13 | 1 |

## Client Sample ID: PWS1104-OS-042621-100
**Lab Sample ID: 320-73077-10**

**Date Collected: 04/26/21 14:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.3** | **J** | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.90** | **J** | 1.8 | 0.52 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1104-OS-042621-100**
**Date Collected: 04/26/21 14:30**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-10**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | | 1.8 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 02:22 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFTeDA* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C3 PFBS* | *82* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *M2-4:2 FTS* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *M2-6:2 FTS* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *M2-8:2 FTS* | *80* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C2 10:2 FTS* | *75* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d3-NMeFOSAA* | *72* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d5-NEtFOSAA* | *83* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d7-N-MeFOSE-M* | *101* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |
| *d9-N-EtFOSE-M* | *95* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:22* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1167-OS-042621-100**
**Date Collected: 04/26/21 15:55**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-12**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.5** | | 1.9 | 0.46 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.5** | | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.2** | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.4** | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.49** | **J** | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.4** | | 1.9 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.7** | **J I B** | 1.9 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **5.4** | | 1.9 | 0.92 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 02:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |

## Client Sample ID: PWS1167-OS-042621-100
**Lab Sample ID: 320-73077-12**
**Date Collected: 04/26/21 15:55**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *100* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFDoA* | *102* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 PFHxDA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *18O2 PFHxS* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C4 PFOS* | *87* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *M2-4:2 FTS* | *83* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *M2-6:2 FTS* | *85* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *M2-8:2 FTS* | *102* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d5-NEtFOSAA* | *77* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d-N-MeFOSA-M* | *69* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d-N-EtFOSA-M* | *63* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |
| *d9-N-EtFOSE-M* | *95* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 02:59* | *1* |

## Client Sample ID: PWS1097-OS-042621-100
**Lab Sample ID: 320-73077-14**
**Date Collected: 04/26/21 17:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.70** | **J** | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.88** | **J** | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |

**Client Sample ID: PWS1097-OS-042621-100**
**Lab Sample ID: 320-73077-14**
**Date Collected: 04/26/21 17:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.2** | **J B** | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.1** | | 1.8 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 03:08 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C5 PFNA* | *110* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFDA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFUnA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFDoA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFTeDA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C3 PFBS* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C8 FOSA* | *96* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *M2-8:2 FTS* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C2 10:2 FTS* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d3-NMeFOSAA* | *82* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d5-NEtFOSAA* | *82* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d7-N-MeFOSE-M* | *110* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:08* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1005-OS-042721-100**
**Date Collected: 04/27/21 08:33**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-16**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.54** | **J I** | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.6** | **J** | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.44** | **J** | 1.9 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.54** | **J** | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.9** | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.37** | **J** | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.9 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.3** | **B** | 1.9 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 03:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:17* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:17* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:17* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:17* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:17* | *1* |

## Client Sample ID: PWS1005-OS-042721-100
**Lab Sample ID: 320-73077-16**

**Date Collected: 04/27/21 08:33**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 95 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 PFDA | 81 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 PFUnA | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 PFDoA | 95 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 PFHxDA | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C4 PFOS | 84 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C8 FOSA | 85 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| M2-4:2 FTS | 117 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| M2-6:2 FTS | 101 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| M2-8:2 FTS | 94 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C2 10:2 FTS | 75 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| 13C3 HFPO-DA | 85 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d3-NMeFOSAA | 78 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d5-NEtFOSAA | 75 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d-N-MeFOSA-M | 74 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d-N-EtFOSA-M | 70 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |
| d9-N-EtFOSE-M | 89 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:17 | 1 |

## Client Sample ID: PWS-FD01-042721
**Lab Sample ID: 320-73077-18**

**Date Collected: 04/27/21 12:01**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **15** | | 4.7 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.55** | **J** | 1.9 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.6** | **J** | 1.9 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.42** | **J** | 1.9 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.51** | **J** | 1.9 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.2** | | 1.9 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.30** | **J** | 1.9 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.9 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS-FD01-042721**
**Date Collected: 04/27/21 12:01**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-18**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.4** | **B** | 1.9 | 0.51 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.98** | **J** | 1.9 | 0.92 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 03:26 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFDoA* | *99* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C4 PFOS* | *81* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *M2-4:2 FTS* | *118* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *M2-6:2 FTS* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *M2-8:2 FTS* | *77* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C2 10:2 FTS* | *77* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d3-NMeFOSAA* | *67* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d5-NEtFOSAA* | *70* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *05/04/21 04:30* | *05/06/21 03:26* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1080-IS-042721-100**
**Date Collected: 04/27/21 09:31**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-19**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.6** | **J** | 4.6 | 2.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.54** | **J** | 1.8 | 0.53 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.9** | | 1.8 | 0.18 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.83** | **J** | 1.8 | 0.27 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.9** | | 1.8 | 0.52 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.7** | **J B** | 1.8 | 0.49 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.8 | 0.90 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 03:36 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:36* | *1* |
| *13C5 PFPeA* | *100* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:36* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:36* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:36* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 03:36* | *1* |

## Client Sample ID: PWS1080-IS-042721-100
**Lab Sample ID: 320-73077-19**

**Date Collected: 04/27/21 09:31**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 106 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 PFDA | 103 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 PFUnA | 102 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 18O2 PFHxS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| M2-4:2 FTS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| M2-6:2 FTS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C2 10:2 FTS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| 13C3 HFPO-DA | 99 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d3-NMeFOSAA | 81 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d5-NEtFOSAA | 76 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d7-N-MeFOSE-M | 102 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |
| d9-N-EtFOSE-M | 95 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 03:36 | 1 |

## Client Sample ID: PWS1052-OS-042721-100
**Lab Sample ID: 320-73077-21**

**Date Collected: 04/27/21 15:21**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **36** | | 4.2 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.90** | **J** | 1.7 | 0.42 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.3** | **J** | 1.7 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.41** | **J** | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **13** | | 1.7 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.26** | **J** | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.29** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **11** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.81** | **J** | 1.7 | 0.25 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.5** | | 1.7 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.24** | **J** | 1.7 | 0.16 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1052-OS-042721-100**
**Date Collected: 04/27/21 15:21**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-21**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **16** | | 1.7 | 0.46 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.7 | 0.83 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:44 | 05/11/21 13:28 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *18O2 PFHxS* | *98* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C4 PFOS* | *95* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *M2-4:2 FTS* | *120* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *M2-6:2 FTS* | *112* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *M2-8:2 FTS* | *104* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C2 10:2 FTS* | *96* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d3-NMeFOSAA* | *99* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d5-NEtFOSAA* | *96* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |
| *d9-N-EtFOSE-M* | *85* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 13:28* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1042-OS-042721-100**
**Date Collected: 04/27/21 16:28**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-23**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **16** | | 4.3 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.48** | **J** | 1.7 | 0.42 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.0** | **J** | 1.7 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.29** | **J** | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.7** | | 1.7 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.24** | **J** | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.5** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.92** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.8** | | 1.7 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.17** | **J I** | 1.7 | 0.16 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **13** | | 1.7 | 0.46 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.6** | | 1.7 | 0.83 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:44 | 05/11/21 13:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *63* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:56* | *1* |
| *13C5 PFPeA* | *68* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:56* | *1* |
| *13C2 PFHxA* | *68* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:56* | *1* |
| *13C4 PFHpA* | *69* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:56* | *1* |
| *13C4 PFOA* | *71* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:56* | *1* |

## Client Sample ID: PWS1042-OS-042721-100
**Lab Sample ID: 320-73077-23**
**Date Collected: 04/27/21 16:28**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 70 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 PFDA | 68 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 PFUnA | 71 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 PFDoA | 65 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 PFTeDA | 64 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 PFHxDA | 73 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C3 PFBS | 65 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 18O2 PFHxS | 67 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C4 PFOS | 69 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C8 FOSA | 69 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| M2-4:2 FTS | 80 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| M2-6:2 FTS | 87 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| M2-8:2 FTS | 78 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C2 10:2 FTS | 79 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| 13C3 HFPO-DA | 65 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d3-NMeFOSAA | 72 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d5-NEtFOSAA | 71 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d-N-MeFOSA-M | 56 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d-N-EtFOSA-M | 50 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d7-N-MeFOSE-M | 62 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |
| d9-N-EtFOSE-M | 65 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:56 | 1 |

## Client Sample ID: PWS1071-IS-042721-100
**Lab Sample ID: 320-73077-25**
**Date Collected: 04/27/21 17:13**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.7** | | 4.1 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.53** | **J** | 1.6 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.83** | **J** | 1.6 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.75** | **J** | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.7** | | 1.6 | 0.69 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.6 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.6 | 0.25 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.6 | 0.90 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.6 | 0.45 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.6 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.6 | 0.59 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.6 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.6 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.4** | | 1.6 | 0.16 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **4.7** | | 1.6 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.0** | | 1.6 | 0.46 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.27** | **J** | 1.6 | 0.15 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1071-IS-042721-100**
**Date Collected: 04/27/21 17:13**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-25**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.6** | | 1.6 | 0.44 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.6 | 0.30 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.6 | 0.79 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.7** | | 1.6 | 0.80 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NMeFOSA | ND | | 1.6 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NEtFOSA | ND | | 1.6 | 0.71 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.98 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NMeFOSE | ND | | 3.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| NEtFOSE | ND | | 1.6 | 0.69 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| 4:2 FTS | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| 8:2 FTS | ND | | 1.6 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| 10:2 FTS | ND | | 1.6 | 0.55 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| F-53B Major | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| F-53B Minor | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.6 | 0.33 | ng/L | | 05/10/21 11:44 | 05/11/21 14:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *61* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C5 PFPeA* | *68* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFHxA* | *68* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C4 PFHpA* | *70* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C4 PFOA* | *71* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C5 PFNA* | *74* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFDA* | *70* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFUnA* | *76* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFDoA* | *70* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFTeDA* | *66* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 PFHxDA* | *69* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C3 PFBS* | *67* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *18O2 PFHxS* | *68* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C4 PFOS* | *67* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C8 FOSA* | *72* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *M2-4:2 FTS* | *88* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *M2-6:2 FTS* | *88* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *M2-8:2 FTS* | *78* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *13C3 HFPO-DA* | *64* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d3-NMeFOSAA* | *74* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d-N-MeFOSA-M* | *60* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d-N-EtFOSA-M* | *52* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d7-N-MeFOSE-M* | *71* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |
| *d9-N-EtFOSE-M* | *67* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:05* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1010-IS-042721-100**
**Lab Sample ID: 320-73077-27**
**Date Collected: 04/27/21 18:26**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.3** | | 4.1 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.6 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.6 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.84** | **J** | 1.6 | 0.69 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.53** | **J** | 1.6 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.59** | **J** | 1.6 | 0.25 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.6 | 0.90 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.6 | 0.45 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.6 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.6 | 0.59 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.6 | 0.72 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.6 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.7** | | 1.6 | 0.16 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.6 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.81** | **J** | 1.6 | 0.46 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.6 | 0.15 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **7.1** | | 1.6 | 0.44 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.6 | 0.30 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.6 | 0.79 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.6 | 0.80 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NMeFOSA | ND | | 1.6 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NEtFOSA | ND | | 1.6 | 0.71 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.98 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NMeFOSE | ND | | 3.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| NEtFOSE | ND | | 1.6 | 0.69 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 4:2 FTS | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.0 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 8:2 FTS | ND | | 1.6 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 10:2 FTS | ND | | 1.6 | 0.55 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| F-53B Major | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| F-53B Minor | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.6 | 0.33 | ng/L | | 05/10/21 11:44 | 05/11/21 14:14 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:14* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:14* | *1* |
| *13C2 PFHxA* | *80* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:14* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:14* | *1* |
| *13C4 PFOA* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:14* | *1* |

## Client Sample ID: PWS1010-IS-042721-100
**Lab Sample ID: 320-73077-27**
**Date Collected: 04/27/21 18:26**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 91 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 PFDA | 79 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 PFUnA | 89 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 PFDoA | 76 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 PFTeDA | 72 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 PFHxDA | 84 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C4 PFOS | 83 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C8 FOSA | 88 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| M2-4:2 FTS | 122 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| M2-6:2 FTS | 116 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C2 10:2 FTS | 91 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| 13C3 HFPO-DA | 74 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d3-NMeFOSAA | 92 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d5-NEtFOSAA | 86 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d-N-EtFOSA-M | 67 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |
| d9-N-EtFOSE-M | 72 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:14 | 1 |

## Client Sample ID: PWS1066-OS-042721-100
**Lab Sample ID: 320-73077-29**
**Date Collected: 04/27/21 19:07**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **89** | | 4.4 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.0** | | 1.8 | 0.43 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.9** | | 1.8 | 0.51 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.56** | **J** | 1.8 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **27** | | 1.8 | 0.75 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.29** | **J** | 1.8 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.3** | | 1.8 | 0.18 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.9** | | 1.8 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.8** | | 1.8 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.33** | **J I** | 1.8 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1066-OS-042721-100**
**Lab Sample ID: 320-73077-29**
**Date Collected: 04/27/21 19:07**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **15** | | 1.8 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.1** | | 1.8 | 0.86 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 14:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C4 PFHpA* | *86* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFUnA* | *95* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFDoA* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFTeDA* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *18O2 PFHxS* | *90* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C4 PFOS* | *88* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *M2-4:2 FTS* | *104* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C2 10:2 FTS* | *100* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *13C3 HFPO-DA* | *80* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d3-NMeFOSAA* | *90* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d5-NEtFOSAA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d7-N-MeFOSE-M* | *90* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 14:23* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1091-OS-042721-100**
**Date Collected: 04/27/21 09:30**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-31**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.8** | | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.5** | **J** | 1.7 | 0.42 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.2** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.7** | | 1.7 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.7 | 0.73 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.30** | **J** | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.37** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.2** | | 1.7 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J I** | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.5** | | 1.7 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 14:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:32* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:32* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:32* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:32* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 14:32* | *1* |

## Client Sample ID: PWS1091-OS-042721-100
**Lab Sample ID: 320-73077-31**

**Date Collected: 04/27/21 09:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 109 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 PFDA | 103 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 PFUnA | 111 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 PFDoA | 104 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 PFHxDA | 97 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C3 PFBS | 101 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 18O2 PFHxS | 106 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C4 PFOS | 101 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C8 FOSA | 115 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| M2-4:2 FTS | 116 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| M2-6:2 FTS | 115 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| M2-8:2 FTS | 118 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C2 10:2 FTS | 111 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| 13C3 HFPO-DA | 96 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d3-NMeFOSAA | 109 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d5-NEtFOSAA | 107 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d-N-MeFOSA-M | 89 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d-N-EtFOSA-M | 80 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d7-N-MeFOSE-M | 103 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |
| d9-N-EtFOSE-M | 100 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 14:32 | 1 |

## Client Sample ID: PWS-FD02-042721
**Lab Sample ID: 320-73077-33**

**Date Collected: 04/27/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.9** | | 4.5 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.8 | 0.44 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.2** | | 1.8 | 0.52 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.7** | **J** | 1.8 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.8 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.84 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.8 | 0.18 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.44** | **J** | 1.8 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.8 | 0.51 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS-FD02-042721**
**Date Collected: 04/27/21 12:02**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-33**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J I** | 1.8 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.87 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.7** | | 1.8 | 0.88 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| NEtFOSE | ND | | 1.8 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/10/21 11:44 | 05/11/21 15:00 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C4 PFHpA* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C4 PFOA* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFDA* | *83* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFDoA* | *77* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFTeDA* | *76* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C3 PFBS* | *80* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C8 FOSA* | *87* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *M2-4:2 FTS* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *M2-6:2 FTS* | *99* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C2 10:2 FTS* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *13C3 HFPO-DA* | *75* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d3-NMeFOSAA* | *88* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d5-NEtFOSAA* | *92* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d-N-EtFOSA-M* | *61* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:00* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1187-OS-042721-100**
**Date Collected: 04/27/21 10:20**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-34**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.0** | **J** | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.93** | **J** | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.60** | **J** | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.6** | | 1.7 | 0.73 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.7** | **I** | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.91** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | **I** | 1.7 | 0.49 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.4** | **J** | 1.7 | 0.46 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:44 | 05/12/21 08:35 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *48* | | *25 - 150* | *05/10/21 11:44* | *05/12/21 08:35* | *1* |
| *13C5 PFPeA* | *32* | | *25 - 150* | *05/10/21 11:44* | *05/12/21 08:35* | *1* |
| *13C2 PFHxA* | *77* | | *25 - 150* | *05/10/21 11:44* | *05/12/21 08:35* | *1* |
| *13C4 PFHpA* | *60* | | *25 - 150* | *05/10/21 11:44* | *05/12/21 08:35* | *1* |
| *13C4 PFOA* | *74* | | *25 - 150* | *05/10/21 11:44* | *05/12/21 08:35* | *1* |

## Client Sample ID: PWS1187-OS-042721-100
**Lab Sample ID: 320-73077-34**

**Date Collected: 04/27/21 10:20**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 82 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 PFDA | 91 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 PFDoA | 90 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 PFTeDA | 87 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 PFHxDA | 92 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C3 PFBS | 55 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 18O2 PFHxS | 70 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C8 FOSA | 87 | | 10 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| M2-4:2 FTS | 107 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| M2-6:2 FTS | 108 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| M2-8:2 FTS | 120 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C2 10:2 FTS | 98 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| 13C3 HFPO-DA | 64 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d3-NMeFOSAA | 96 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d5-NEtFOSAA | 96 | | 25 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 05/10/21 11:44 | 05/12/21 08:35 | 1 |

## Client Sample ID: PWS1086-OS-042721-100
**Lab Sample ID: 320-73077-36**

**Date Collected: 04/27/21 11:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.7** | | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **5.5** | | 1.7 | 0.43 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **4.6** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.3** | | 1.7 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.2** | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.2** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.36** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.1** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1086-OS-042721-100**
**Date Collected: 04/27/21 11:05**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-36**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.9** | **I** | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.5** | | 1.7 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 15:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *73* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C5 PFPeA* | *73* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFHxA* | *72* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C4 PFHpA* | *80* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C4 PFOA* | *78* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C5 PFNA* | *81* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFDA* | *79* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFUnA* | *79* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFDoA* | *75* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFTeDA* | *73* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 PFHxDA* | *73* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C3 PFBS* | *72* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C4 PFOS* | *73* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *M2-4:2 FTS* | *89* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *M2-6:2 FTS* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *M2-8:2 FTS* | *85* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C2 10:2 FTS* | *86* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *13C3 HFPO-DA* | *70* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d3-NMeFOSAA* | *76* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d5-NEtFOSAA* | *83* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d-N-EtFOSA-M* | *55* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |
| *d9-N-EtFOSE-M* | *73* | | *10 - 150* | *05/10/21 11:44* | *05/11/21 15:18* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1099-OS-042721-100**
**Date Collected: 04/27/21 11:45**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-38**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **10** | | 4.3 | 2.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.7 | 0.43 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.7** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.3** | **J** | 1.7 | 0.22 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **4.0** | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.1** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.59** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.9** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.1** | | 1.7 | 0.47 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.2** | | 1.7 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:44 | 05/11/21 15:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:27* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:27* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:27* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:27* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 15:27* | *1* |

## Client Sample ID: PWS1099-OS-042721-100
**Lab Sample ID: 320-73077-38**
**Date Collected: 04/27/21 11:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 97 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 PFDA | 91 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 PFTeDA | 84 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 PFHxDA | 91 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 18O2 PFHxS | 95 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C4 PFOS | 97 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C8 FOSA | 98 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| M2-4:2 FTS | 113 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| M2-6:2 FTS | 111 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| M2-8:2 FTS | 105 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C2 10:2 FTS | 106 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d3-NMeFOSAA | 99 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d5-NEtFOSAA | 104 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |
| d9-N-EtFOSE-M | 93 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 15:27 | 1 |

## Client Sample ID: PWS1096-OS-042721-100
**Lab Sample ID: 320-73077-40**
**Date Collected: 04/27/21 12:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.84** | **J** | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.5** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.4** | | 1.8 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1096-OS-042721-100**
**Lab Sample ID: 320-73077-40**
**Date Collected: 04/27/21 12:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.6** | **I** | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 20:41 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFUnA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFDoA* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFTeDA* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 PFHxDA* | *107* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C3 PFBS* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *18O2 PFHxS* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C4 PFOS* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *M2-4:2 FTS* | *86* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *M2-8:2 FTS* | *111* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d5-NEtFOSAA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:41* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1090-OS-042721-100**
**Lab Sample ID: 320-73077-42**
**Date Collected: 04/27/21 13:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.8** | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.2** | **J** | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.0** | | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.63** | **J** | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.0** | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.7** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.0** | **J** | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **7.0** | | 1.8 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.0** | **I** | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 20:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:50* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:50* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:50* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:50* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:50* | *1* |

## Client Sample ID: PWS1090-OS-042721-100
**Lab Sample ID: 320-73077-42**

**Date Collected: 04/27/21 13:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 107 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 PFDA | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 PFDoA | 100 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 PFTeDA | 108 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 PFHxDA | 109 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C3 PFBS | 86 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 18O2 PFHxS | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C4 PFOS | 97 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| M2-4:2 FTS | 85 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| M2-6:2 FTS | 104 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| M2-8:2 FTS | 111 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C2 10:2 FTS | 122 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d3-NMeFOSAA | 93 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d5-NEtFOSAA | 106 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d-N-MeFOSA-M | 88 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d-N-EtFOSA-M | 92 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |
| d9-N-EtFOSE-M | 101 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 20:50 | 1 |

## Client Sample ID: PWS1098-OS-042721-100
**Lab Sample ID: 320-73077-44**

**Date Collected: 04/27/21 14:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1098-OS-042721-100**
**Lab Sample ID: 320-73077-44**
**Date Collected: 04/27/21 14:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 20:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFUnA* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFDoA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFTeDA* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 PFHxDA* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C4 PFOS* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C8 FOSA* | *99* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *M2-4:2 FTS* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *M2-6:2 FTS* | *114* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *M2-8:2 FTS* | *114* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C2 10:2 FTS* | *111* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d5-NEtFOSAA* | *113* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |
| *d9-N-EtFOSE-M* | *95* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:59* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1093-OS-042721-100**
**Date Collected: 04/27/21 15:50**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-46**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **9.6** | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.5** | **J** | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.0** | | 1.8 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.95** | **J** | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.4** | | 1.8 | 0.79 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.0** | | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.75** | **J** | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.4** | | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.91 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 21:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:09* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:09* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:09* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:09* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:09* | *1* |

## Client Sample ID: PWS1093-OS-042721-100
**Lab Sample ID: 320-73077-46**

**Date Collected: 04/27/21 15:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 99 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 PFUnA | 94 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 PFTeDA | 99 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 PFHxDA | 106 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C3 PFBS | 81 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 18O2 PFHxS | 90 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C4 PFOS | 94 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| M2-4:2 FTS | 84 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| M2-6:2 FTS | 114 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| M2-8:2 FTS | 105 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d3-NMeFOSAA | 86 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d5-NEtFOSAA | 105 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d-N-MeFOSA-M | 79 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d-N-EtFOSA-M | 78 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d7-N-MeFOSE-M | 81 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |
| d9-N-EtFOSE-M | 89 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 21:09 | 1 |

## Client Sample ID: PWS1094-OS-042721-100
**Lab Sample ID: 320-73077-48**

**Date Collected: 04/27/21 17:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.9** | **J** | 4.7 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.9 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.3** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **12** | | 1.9 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1094-OS-042721-100**
**Lab Sample ID: 320-73077-48**
**Date Collected: 04/27/21 17:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.2** | **I** | 1.9 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 21:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFDA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFUnA* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFDoA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFTeDA* | *105* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 PFHxDA* | *108* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *18O2 PFHxS* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C4 PFOS* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C8 FOSA* | *106* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *M2-8:2 FTS* | *112* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C2 10:2 FTS* | *118* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d5-NEtFOSAA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d-N-MeFOSA-M* | *86* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d-N-EtFOSA-M* | *90* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |
| *d9-N-EtFOSE-M* | *98* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:18* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1121-OS-042721-100**
**Date Collected: 04/27/21 18:00**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-50**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.0** | | 4.4 | 2.1 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.4** | **J** | 1.8 | 0.43 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.9** | | 1.8 | 0.51 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.2** | | 1.8 | 0.22 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **7.8** | | 1.8 | 0.74 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.96 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.82 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.3** | | 1.8 | 0.18 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.51** | **J** | 1.8 | 0.26 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **6.4** | | 1.8 | 0.50 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.36** | **J** | 1.8 | 0.17 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **10** | **I** | 1.8 | 0.47 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.32 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.9** | | 1.8 | 0.86 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| NEtFOSE | ND | | 1.8 | 0.74 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/11/21 12:00 | 05/12/21 08:26 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C5 PFPeA* | *72* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C4 PFOA* | *88* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |

## Client Sample ID: PWS1121-OS-042721-100
**Lab Sample ID: 320-73077-50**
**Date Collected: 04/27/21 18:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *92* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFDoA* | *88* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 PFHxDA* | *78* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C3 PFBS* | *71* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *18O2 PFHxS* | *81* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *M2-4:2 FTS* | *83* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *M2-8:2 FTS* | *109* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C2 10:2 FTS* | *88* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d3-NMeFOSAA* | *99* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d5-NEtFOSAA* | *97* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d-N-MeFOSA-M* | *64* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d-N-EtFOSA-M* | *54* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 08:26* | *1* |

## Client Sample ID: PWS1129-OS-042821-100
**Lab Sample ID: 320-73077-52**
**Date Collected: 04/28/21 08:32**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.3** | **J** | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.5** | **J** | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.6** | **J** | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.7** | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.2** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.84** | **J** | 1.8 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1129-OS-042821-100**
**Lab Sample ID: 320-73077-52**
**Date Collected: 04/28/21 08:32**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.4** | | 1.8 | 0.49 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 21:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFUnA* | *106* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFDoA* | *105* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFTeDA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 PFHxDA* | *108* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *18O2 PFHxS* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C4 PFOS* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C8 FOSA* | *104* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *M2-4:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *M2-6:2 FTS* | *119* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *M2-8:2 FTS* | *111* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C2 10:2 FTS* | *123* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d5-NEtFOSAA* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d7-N-MeFOSE-M* | *89* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |
| *d9-N-EtFOSE-M* | *101* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 21:37* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD01-042821**
**Lab Sample ID: 320-73077-54**
**Date Collected: 04/28/21 12:01**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.3** | **J** | 4.7 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.9 | 0.47 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.8** | **J** | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.59** | **J** | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.2** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.77** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.0** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 22:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:15* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:15* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:15* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:15* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:15* | *1* |

## Client Sample ID: PWS-FD01-042821
**Lab Sample ID: 320-73077-54**
**Date Collected: 04/28/21 12:01**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 100 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 PFHxDA | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C4 PFOS | 96 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C8 FOSA | 98 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| M2-4:2 FTS | 93 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| M2-6:2 FTS | 108 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C2 10:2 FTS | 115 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| 13C3 HFPO-DA | 88 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d3-NMeFOSAA | 91 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d5-NEtFOSAA | 110 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d-N-MeFOSA-M | 82 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d-N-EtFOSA-M | 83 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |
| d9-N-EtFOSE-M | 97 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:15 | 1 |

## Client Sample ID: PWS1115-OS-042821-100
**Lab Sample ID: 320-73077-55**
**Date Collected: 04/28/21 09:28**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.2** | | 4.7 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | **J** | 1.9 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.0** | | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.3** | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.9 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.96** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1115-OS-042821-100**
**Lab Sample ID: 320-73077-55**
**Date Collected: 04/28/21 09:28**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **8.2** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 22:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFUnA* | *114* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFDoA* | *111* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFTeDA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 PFHxDA* | *112* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *18O2 PFHxS* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C4 PFOS* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C8 FOSA* | *108* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *M2-4:2 FTS* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *M2-6:2 FTS* | *108* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *M2-8:2 FTS* | *118* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C2 10:2 FTS* | *123* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d3-NMeFOSAA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d5-NEtFOSAA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d-N-MeFOSA-M* | *87* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d-N-EtFOSA-M* | *91* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d7-N-MeFOSE-M* | *98* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |
| *d9-N-EtFOSE-M* | *107* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:24* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1001-OS-042821-100**
**Lab Sample ID: 320-73077-57**
**Date Collected: 04/28/21 10:11**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.0** | | 4.8 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.47 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.99** | **J** | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.87** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.60** | **J** | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.94 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 22:33 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *74* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:33* | *1* |
| *13C5 PFPeA* | *71* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:33* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:33* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:33* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:33* | *1* |

## Client Sample ID: PWS1001-OS-042821-100
**Lab Sample ID: 320-73077-57**

**Date Collected: 04/28/21 10:11**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 100 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 PFDA | 102 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 PFUnA | 109 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 PFDoA | 110 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 PFTeDA | 101 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 PFHxDA | 104 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C3 PFBS | 81 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 18O2 PFHxS | 89 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C4 PFOS | 99 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| M2-4:2 FTS | 99 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| M2-6:2 FTS | 124 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| M2-8:2 FTS | 110 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C2 10:2 FTS | 134 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d3-NMeFOSAA | 88 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d5-NEtFOSAA | 110 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d-N-MeFOSA-M | 82 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d-N-EtFOSA-M | 86 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |
| d9-N-EtFOSE-M | 95 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:33 | 1 |

## Client Sample ID: PWS1082-OS-042821-100
**Lab Sample ID: 320-73077-59**

**Date Collected: 04/28/21 12:27**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.0** | | 4.7 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.0** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1082-OS-042821-100**
**Lab Sample ID: 320-73077-59**
**Date Collected: 04/28/21 12:27**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 22:43 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFDoA* | *105* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFTeDA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *18O2 PFHxS* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C4 PFOS* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C8 FOSA* | *96* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *M2-4:2 FTS* | *72* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *M2-6:2 FTS* | *112* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *M2-8:2 FTS* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d5-NEtFOSAA* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d-N-MeFOSA-M* | *84* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d-N-EtFOSA-M* | *81* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d7-N-MeFOSE-M* | *94* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |
| *d9-N-EtFOSE-M* | *98* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 22:43* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1141-OS-042821-100**
**Lab Sample ID: 320-73077-61**
**Date Collected: 04/28/21 14:23**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.44** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.2** | **J** | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.2** | **I** | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.91 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 22:52 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:52* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:52* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:52* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:52* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 22:52* | *1* |

## Client Sample ID: PWS1141-OS-042821-100
**Lab Sample ID: 320-73077-61**

**Date Collected: 04/28/21 14:23**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 PFUnA | 95 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 PFDoA | 104 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 PFTeDA | 103 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 PFHxDA | 103 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C8 FOSA | 100 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| M2-4:2 FTS | 106 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| M2-6:2 FTS | 117 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| M2-8:2 FTS | 113 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C2 10:2 FTS | 114 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d3-NMeFOSAA | 90 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d5-NEtFOSAA | 104 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d-N-MeFOSA-M | 79 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d-N-EtFOSA-M | 89 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d7-N-MeFOSE-M | 98 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |
| d9-N-EtFOSE-M | 93 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 22:52 | 1 |

## Client Sample ID: PWS1050-OS-042821-100
**Lab Sample ID: 320-73077-63**

**Date Collected: 04/28/21 15:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **56** | | 4.7 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **5.2** | | 1.9 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **3.9** | | 1.9 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.97** | **J** | 1.9 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **21** | | 1.9 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.2** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.0** | **J** | 1.9 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.3** | | 1.9 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1050-OS-042821-100**
**Lab Sample ID: 320-73077-63**
**Date Collected: 04/28/21 15:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **6.1** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:16 | 05/10/21 23:02 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C5 PFNA* | *107* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFUnA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFDoA* | *107* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFTeDA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C3 PFBS* | *83* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *18O2 PFHxS* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C4 PFOS* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *M2-4:2 FTS* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *M2-6:2 FTS* | *105* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *M2-8:2 FTS* | *108* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *13C3 HFPO-DA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d5-NEtFOSAA* | *104* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:02* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1095-IS-042821-100**
**Date Collected: 04/28/21 16:03**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-65**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.39** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.2** | | 1.8 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.76** | **J** | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 23:11 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:11* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:11* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:11* | *1* |
| *13C4 PFHpA* | *83* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:11* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:11* | *1* |

## Client Sample ID: PWS1095-IS-042821-100
**Lab Sample ID: 320-73077-65**

**Date Collected: 04/28/21 16:03**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 PFDA | 89 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C3 PFBS | 82 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C4 PFOS | 91 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| M2-4:2 FTS | 80 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| M2-6:2 FTS | 103 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| 13C3 HFPO-DA | 79 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d5-NEtFOSAA | 100 | | 25 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d-N-MeFOSA-M | 79 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d-N-EtFOSA-M | 78 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 | 05/05/21 04:16 | 05/10/21 23:11 | 1 |

## Client Sample ID: PWS1111-OS-042821-100
**Lab Sample ID: 320-73077-67**

**Date Collected: 04/28/21 17:04**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.52 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1111-OS-042821-100**
**Date Collected: 04/28/21 17:04**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-67**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 23:20 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFDoA* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFTeDA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 PFHxDA* | *100* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *18O2 PFHxS* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C4 PFOS* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C8 FOSA* | *99* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *M2-4:2 FTS* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *M2-6:2 FTS* | *108* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *M2-8:2 FTS* | *111* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C2 10:2 FTS* | *110* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *13C3 HFPO-DA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d3-NMeFOSAA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d5-NEtFOSAA* | *102* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d-N-MeFOSA-M* | *82* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |
| *d9-N-EtFOSE-M* | *95* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 23:20* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1085-OS-042821-100**
**Date Collected: 04/28/21 08:45**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-69**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.4** | **J** | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.71** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.33** | **J** | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.35** | **J** | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.59** | **J** | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.1** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.63** | **J** | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | **J** | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.29** | **J** | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.85** | **J I** | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **Perfluorodecanesulfonic acid (PFDS)** | **0.34** | **J** | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **NMeFOSA** | **0.42** | **J I** | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **4:2 FTS** | **0.38** | **J** | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| **F-53B Major** | **0.37** | **J** | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 16:51 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:51* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:51* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:51* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:51* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:51* | *1* |

## Client Sample ID: PWS1085-OS-042821-100
**Lab Sample ID: 320-73077-69**

**Date Collected: 04/28/21 08:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 91 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 PFDA | 87 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 PFUnA | 95 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 PFDoA | 86 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 PFTeDA | 85 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 PFHxDA | 96 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C4 PFOS | 81 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| M2-4:2 FTS | 75 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| M2-6:2 FTS | 91 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| M2-8:2 FTS | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C2 10:2 FTS | 85 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d3-NMeFOSAA | 72 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d5-NEtFOSAA | 74 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d-N-EtFOSA-M | 67 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |
| d9-N-EtFOSE-M | 92 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 16:51 | 1 |

## Client Sample ID: PWS1118-OS-042821-100
**Lab Sample ID: 320-73077-71**

**Date Collected: 04/28/21 09:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.7** | | 4.8 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.89** | **J** | 1.9 | 0.47 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.2** | **J** | 1.9 | 0.56 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.68** | **J** | 1.9 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.2** | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.37** | **J** | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.2** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.77** | **J** | 1.9 | 0.55 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1118-OS-042821-100**
**Lab Sample ID: 320-73077-71**
**Date Collected: 04/28/21 09:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.9** | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.94 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 17:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFDA* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFTeDA* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *18O2 PFHxS* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C4 PFOS* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C8 FOSA* | *80* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *M2-4:2 FTS* | *108* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *M2-8:2 FTS* | *100* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C2 10:2 FTS* | *77* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d5-NEtFOSAA* | *82* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d-N-EtFOSA-M* | *69* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:19* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS-FD02-042821**
**Lab Sample ID: 320-73077-73**
**Date Collected: 04/28/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.9** | | 4.7 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.95** | **J** | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.67** | **J** | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.2** | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.0** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.67** | **J** | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.8** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 17:28 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:28* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:28* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:28* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:28* | *1* |
| *13C4 PFOA* | *103* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:28* | *1* |

## Client Sample ID: PWS-FD02-042821
**Lab Sample ID: 320-73077-73**

**Date Collected: 04/28/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 100 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 PFDA | 103 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 PFDoA | 106 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C3 PFBS | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 18O2 PFHxS | 97 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| M2-4:2 FTS | 132 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| M2-6:2 FTS | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| 13C3 HFPO-DA | 98 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d5-NEtFOSAA | 76 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d-N-EtFOSA-M | 75 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d7-N-MeFOSE-M | 102 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |
| d9-N-EtFOSE-M | 98 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:28 | 1 |

## Client Sample ID: PWS1084-OS-042821-100
**Lab Sample ID: 320-73077-74**

**Date Collected: 04/28/21 10:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.0** | **J** | 4.7 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.4** | | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **9.9** | | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **5.5** | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **15** | | 1.9 | 0.79 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.68** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.1** | | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1084-OS-042821-100**
**Date Collected: 04/28/21 10:10**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-74**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | **I** | 1.9 | 0.50 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 17:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFUnA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C3 PFBS* | *76* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *18O2 PFHxS* | *77* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C4 PFOS* | *75* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C8 FOSA* | *81* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *M2-4:2 FTS* | *77* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *M2-6:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *M2-8:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d3-NMeFOSAA* | *75* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d5-NEtFOSAA* | *76* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d-N-MeFOSA-M* | *69* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d7-N-MeFOSE-M* | *98* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |
| *d9-N-EtFOSE-M* | *94* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:37* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1164-IS-042821-100**
**Date Collected: 04/28/21 11:20**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-76**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **14** | | 4.7 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.8** | | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **7.6** | | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.7** | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.9 | 0.79 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **9.1** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **4.4** | | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **8.0** | | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J** | 1.9 | 0.50 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 17:46 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:46* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:46* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:46* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:46* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:46* | *1* |

## Client Sample ID: PWS1164-IS-042821-100
**Lab Sample ID: 320-73077-76**
**Date Collected: 04/28/21 11:20**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 110 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 PFDA | 103 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 PFUnA | 107 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 PFDoA | 112 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 PFTeDA | 98 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 PFHxDA | 107 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 18O2 PFHxS | 96 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| M2-4:2 FTS | 117 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| M2-6:2 FTS | 91 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| M2-8:2 FTS | 77 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| 13C3 HFPO-DA | 96 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d3-NMeFOSAA | 70 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d5-NEtFOSAA | 74 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d-N-MeFOSA-M | 78 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d-N-EtFOSA-M | 80 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d7-N-MeFOSE-M | 92 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 17:46 | 1 |

## Client Sample ID: PWS1199-IS-042821-100
**Lab Sample ID: 320-73077-78**
**Date Collected: 04/28/21 12:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **7.9** | | 1.8 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **6.7** | | 1.8 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **15** | | 1.8 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1199-IS-042821-100**
**Lab Sample ID: 320-73077-78**
**Date Collected: 04/28/21 12:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **0.85** | **J** | 1.8 | 0.50 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 17:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 PFHxDA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C3 PFBS* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *M2-4:2 FTS* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *M2-6:2 FTS* | *98* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *M2-8:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d3-NMeFOSAA* | *74* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d5-NEtFOSAA* | *75* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d-N-MeFOSA-M* | *71* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 17:55* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1150-OS-042821-100**
**Date Collected: 04/28/21 12:55**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-80**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.24** | **J** | 1.8 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.72** | **J** | 1.8 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.9** | | 1.8 | 0.50 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 18:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C5 PFPeA* | *88* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |

## Client Sample ID: PWS1150-OS-042821-100
**Lab Sample ID: 320-73077-80**
**Date Collected: 04/28/21 12:55**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *99* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFUnA* | *109* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFDoA* | *104* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFTeDA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C3 PFBS* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *18O2 PFHxS* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *M2-4:2 FTS* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *M2-6:2 FTS* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *M2-8:2 FTS* | *76* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C2 10:2 FTS* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d3-NMeFOSAA* | *73* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d5-NEtFOSAA* | *71* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d-N-EtFOSA-M* | *74* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |
| *d9-N-EtFOSE-M* | *78* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:32* | *1* |

## Client Sample ID: PWS1158-OS-042821-100
**Lab Sample ID: 320-73077-82**
**Date Collected: 04/28/21 14:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.8 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.47 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.78** | **J** | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.89** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1158-OS-042821-100**
**Lab Sample ID: 320-73077-82**
**Date Collected: 04/28/21 14:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.0** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 18:41 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFDoA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C3 PFBS* | *82* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C4 PFOS* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C8 FOSA* | *86* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *M2-4:2 FTS* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *M2-6:2 FTS* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *M2-8:2 FTS* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d3-NMeFOSAA* | *74* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d7-N-MeFOSE-M* | *87* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:41* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1177-OS-042821-100**
**Date Collected: 04/28/21 15:35**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-84**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.6** | **J** | 4.8 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.2** | | 1.9 | 0.47 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.6** | **J** | 1.9 | 0.56 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.80** | **J** | 1.9 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.2** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.32** | **J** | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.9 | 0.55 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.9** | **I** | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.94 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 18:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:50* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:50* | *1* |
| *13C2 PFHxA* | *103* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:50* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:50* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:50* | *1* |

## Client Sample ID: PWS1177-OS-042821-100
**Lab Sample ID: 320-73077-84**

**Date Collected: 04/28/21 15:35**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 PFDA | 97 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 PFUnA | 106 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 PFDoA | 101 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 PFTeDA | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 PFHxDA | 97 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 18O2 PFHxS | 97 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C8 FOSA | 96 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| M2-4:2 FTS | 96 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| M2-6:2 FTS | 90 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C2 10:2 FTS | 81 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d3-NMeFOSAA | 80 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d5-NEtFOSAA | 83 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |
| d9-N-EtFOSE-M | 99 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 18:50 | 1 |

## Client Sample ID: PWS1178-OS-042821-100
**Lab Sample ID: 320-73077-86**

**Date Collected: 04/28/21 16:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **11** | | 4.5 | 2.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.3** | **J** | 1.8 | 0.44 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.1** | **J** | 1.8 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.52** | **J** | 1.8 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.8 | 0.77 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.99 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **100** | | 1.8 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.38** | **J** | 1.8 | 0.27 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.8 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1178-OS-042821-100**
**Lab Sample ID: 320-73077-86**
**Date Collected: 04/28/21 16:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.5** | | 1.8 | 0.49 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NEtFOSA | ND | | 1.8 | 0.78 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.60 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/05/21 04:32 | 05/06/21 18:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C4 PFHpA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *18O2 PFHxS* | *79* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C4 PFOS* | *78* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C8 FOSA* | *85* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *M2-4:2 FTS* | *120* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *M2-6:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *M2-8:2 FTS* | *70* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C2 10:2 FTS* | *71* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d3-NMeFOSAA* | *58* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d5-NEtFOSAA* | *61* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d-N-MeFOSA-M* | *65* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d7-N-MeFOSE-M* | *73* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 18:59* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

**Client Sample ID: PWS1102-OS-042821-100**
**Date Collected: 04/28/21 17:05**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-88**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 19:08 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:08* | *1* |

## Client Sample ID: PWS1102-OS-042821-100
**Lab Sample ID: 320-73077-88**

**Date Collected: 04/28/21 17:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 88 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C2 PFTeDA | 92 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 18O2 PFHxS | 89 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C4 PFOS | 78 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C8 FOSA | 82 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| M2-4:2 FTS | 80 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| M2-6:2 FTS | 80 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| M2-8:2 FTS | 88 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C2 10:2 FTS | 83 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d3-NMeFOSAA | 82 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d-N-EtFOSA-M | 74 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |
| d9-N-EtFOSE-M | 93 | | 10 - 150 | 05/05/21 04:32 | 05/06/21 19:08 | 1 |

## Client Sample ID: PWS1186-IS-042821-100
**Lab Sample ID: 320-73077-90**

**Date Collected: 04/28/21 17:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.7** | **J** | 4.7 | 2.3 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.6** | | 1.9 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | **J** | 1.9 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.9** | | 1.9 | 0.51 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |

**Client Sample ID: PWS1186-IS-042821-100**
**Date Collected: 04/28/21 17:45**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-90**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/05/21 04:32 | 05/06/21 19:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFDA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFTeDA* | *99* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C3 PFBS* | *72* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *18O2 PFHxS* | *79* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C4 PFOS* | *74* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *M2-4:2 FTS* | *116* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *M2-6:2 FTS* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *M2-8:2 FTS* | *67* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C2 10:2 FTS* | *67* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d5-NEtFOSAA* | *65* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d7-N-MeFOSE-M* | *78* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |
| *d9-N-EtFOSE-M* | *67* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 19:17* | *1* |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-73077-1 | PWS1132-OS-042621-100 | 73 | 86 | 85 | 93 | 96 | 90 | 80 | 95 |
| 320-73077-1 MS | PWS-MS02-042621 | 84 | 99 | 99 | 107 | 95 | 100 | 94 | 105 |
| 320-73077-1 MSD | PWS-MSD02-042621 | 83 | 89 | 95 | 93 | 97 | 89 | 100 | 94 |
| 320-73077-3 | PWS1105-OS-042621-100 | 86 | 88 | 88 | 90 | 93 | 91 | 89 | 90 |
| 320-73077-5 | PWS-FD02-042621 | 95 | 92 | 95 | 99 | 97 | 105 | 95 | 105 |
| 320-73077-6 | PWS1182-OS-042621-100 | 78 | 82 | 95 | 99 | 97 | 103 | 94 | 88 |
| 320-73077-8 | PWS1200-OS-042621-100 | 91 | 88 | 91 | 96 | 98 | 95 | 99 | 101 |
| 320-73077-10 | PWS1104-OS-042621-100 | 88 | 90 | 88 | 94 | 101 | 103 | 92 | 97 |
| 320-73077-12 | PWS1167-OS-042621-100 | 85 | 96 | 94 | 100 | 98 | 100 | 93 | 97 |
| 320-73077-14 | PWS1097-OS-042621-100 | 91 | 97 | 92 | 99 | 98 | 110 | 103 | 99 |
| 320-73077-16 | PWS1005-OS-042721-100 | 70 | 83 | 86 | 89 | 99 | 95 | 81 | 97 |
| 320-73077-18 | PWS-FD01-042721 | 72 | 86 | 89 | 97 | 96 | 95 | 93 | 93 |
| 320-73077-19 | PWS1080-IS-042721-100 | 94 | 100 | 97 | 107 | 100 | 106 | 103 | 102 |
| 320-73077-21 | PWS1052-OS-042721-100 | 87 | 86 | 93 | 92 | 94 | 101 | 91 | 102 |
| 320-73077-21 MS | PWS-MS01-042721 | 69 | 74 | 72 | 74 | 72 | 79 | 74 | 79 |
| 320-73077-21 MSD | PWS-MSD01-042721 | 77 | 82 | 81 | 80 | 84 | 87 | 81 | 92 |
| 320-73077-23 | PWS1042-OS-042721-100 | 63 | 68 | 68 | 69 | 71 | 70 | 68 | 71 |
| 320-73077-25 | PWS1071-IS-042721-100 | 61 | 68 | 68 | 70 | 71 | 74 | 70 | 76 |
| 320-73077-27 | PWS1010-IS-042721-100 | 62 | 74 | 80 | 82 | 84 | 91 | 79 | 89 |
| 320-73077-29 | PWS1066-OS-042721-100 | 83 | 85 | 84 | 86 | 92 | 92 | 86 | 95 |
| 320-73077-31 | PWS1091-OS-042721-100 | 98 | 99 | 98 | 101 | 100 | 109 | 103 | 111 |
| 320-73077-33 | PWS-FD02-042721 | 76 | 82 | 79 | 85 | 84 | 88 | 83 | 89 |
| 320-73077-34 | PWS1187-OS-042721-100 | 48 | 32 | 77 | 60 | 74 | 82 | 91 | 99 |
| 320-73077-36 | PWS1086-OS-042721-100 | 73 | 73 | 72 | 80 | 78 | 81 | 79 | 79 |
| 320-73077-38 | PWS1099-OS-042721-100 | 82 | 87 | 91 | 91 | 94 | 97 | 91 | 99 |
| 320-73077-40 | PWS1096-OS-042721-100 | 96 | 83 | 94 | 96 | 100 | 99 | 91 | 96 |
| 320-73077-42 | PWS1090-OS-042721-100 | 97 | 90 | 90 | 95 | 94 | 107 | 98 | 99 |
| 320-73077-44 | PWS1098-OS-042721-100 | 103 | 88 | 91 | 89 | 95 | 100 | 93 | 98 |
| 320-73077-46 | PWS1093-OS-042721-100 | 89 | 80 | 85 | 92 | 92 | 99 | 89 | 94 |
| 320-73077-48 | PWS1094-OS-042721-100 | 100 | 90 | 100 | 100 | 99 | 104 | 104 | 109 |
| 320-73077-50 | PWS1121-OS-042721-100 | 81 | 72 | 95 | 88 | 88 | 92 | 88 | 97 |
| 320-73077-52 | PWS1129-OS-042821-100 | 99 | 90 | 92 | 91 | 91 | 96 | 96 | 106 |
| 320-73077-54 | PWS-FD01-042821 | 95 | 89 | 95 | 99 | 98 | 100 | 89 | 100 |
| 320-73077-55 | PWS1115-OS-042821-100 | 101 | 92 | 99 | 100 | 100 | 106 | 97 | 114 |
| 320-73077-57 | PWS1001-OS-042821-100 | 74 | 71 | 86 | 88 | 102 | 100 | 102 | 109 |
| 320-73077-59 | PWS1082-OS-042821-100 | 91 | 84 | 83 | 87 | 91 | 97 | 94 | 102 |
| 320-73077-61 | PWS1141-OS-042821-100 | 92 | 82 | 90 | 92 | 93 | 94 | 94 | 95 |
| 320-73077-63 | PWS1050-OS-042821-100 | 96 | 85 | 97 | 92 | 98 | 107 | 96 | 103 |
| 320-73077-65 | PWS1095-IS-042821-100 | 86 | 87 | 88 | 83 | 85 | 90 | 89 | 91 |
| 320-73077-67 | PWS1111-OS-042821-100 | 92 | 84 | 90 | 88 | 93 | 101 | 91 | 100 |
| 320-73077-69 | PWS1085-OS-042821-100 | 80 | 84 | 85 | 96 | 93 | 91 | 87 | 95 |
| 320-73077-69 MS | PWS-MS02-042821 | 91 | 90 | 94 | 93 | 98 | 88 | 100 | 100 |
| 320-73077-69 MSD | PWS-MSD02-042821 | 90 | 92 | 94 | 106 | 94 | 86 | 89 | 106 |
| 320-73077-71 | PWS1118-OS-042821-100 | 77 | 83 | 83 | 93 | 96 | 90 | 80 | 89 |
| 320-73077-73 | PWS-FD02-042821 | 86 | 92 | 95 | 102 | 103 | 100 | 103 | 99 |
| 320-73077-74 | PWS1084-OS-042821-100 | 84 | 89 | 84 | 95 | 96 | 90 | 89 | 96 |
| 320-73077-76 | PWS1164-IS-042821-100 | 85 | 93 | 100 | 104 | 101 | 110 | 103 | 107 |
| 320-73077-78 | PWS1199-IS-042821-100 | 78 | 86 | 86 | 92 | 100 | 91 | 96 | 93 |
| 320-73077-80 | PWS1150-OS-042821-100 | 87 | 88 | 97 | 101 | 96 | 99 | 89 | 109 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-73077-82 | PWS1158-OS-042821-100 | 83 | 87 | 93 | 98 | 94 | 99 | 95 | 89 |
| 320-73077-84 | PWS1177-OS-042821-100 | 84 | 91 | 103 | 101 | 98 | 92 | 97 | 106 |
| 320-73077-86 | PWS1178-OS-042821-100 | 75 | 80 | 90 | 87 | 92 | 90 | 86 | 89 |
| 320-73077-88 | PWS1102-OS-042821-100 | 90 | 93 | 91 | 97 | 95 | 101 | 99 | 102 |
| 320-73077-90 | PWS1186-IS-042821-100 | 70 | 79 | 81 | 90 | 96 | 88 | 87 | 94 |
| LCS 320-485558/2-A | Lab Control Sample | 96 | 96 | 105 | 106 | 101 | 92 | 88 | 107 |
| LCS 320-485967/2-A | Lab Control Sample | 100 | 98 | 89 | 92 | 96 | 98 | 90 | 90 |
| LCS 320-485969/2-A | Lab Control Sample | 91 | 88 | 96 | 102 | 96 | 90 | 91 | 92 |
| LCS 320-487624/2-A | Lab Control Sample | 75 | 77 | 74 | 74 | 75 | 80 | 77 | 80 |
| LCS 320-487960/2-A | Lab Control Sample | 85 | 81 | 94 | 88 | 86 | 95 | 92 | 98 |
| LCSD 320-485967/3-A | Lab Control Sample Dup | 95 | 97 | 95 | 96 | 96 | 105 | 94 | 105 |
| LCSD 320-487960/3-A | Lab Control Sample Dup | 68 | 66 | 76 | 75 | 73 | 68 | 70 | 73 |
| MB 320-485558/1-A | Method Blank | 103 | 106 | 101 | 110 | 98 | 107 | 111 | 104 |
| MB 320-485967/1-A | Method Blank | 91 | 94 | 89 | 88 | 97 | 96 | 91 | 96 |
| MB 320-485969/1-A | Method Blank | 84 | 80 | 81 | 91 | 93 | 95 | 86 | 101 |
| MB 320-487624/1-A | Method Blank | 104 | 109 | 108 | 111 | 110 | 115 | 113 | 125 |
| MB 320-487960/1-A | Method Blank | 70 | 62 | 75 | 67 | 72 | 70 | 68 | 77 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-73077-1 | PWS1132-OS-042621-100 | 91 | 82 | 81 | 76 | 74 | 76 | 81 | 90 |
| 320-73077-1 MS | PWS-MS02-042621 | 96 | 94 | 103 | 92 | 81 | 84 | 85 | 98 |
| 320-73077-1 MSD | PWS-MSD02-042621 | 89 | 89 | 92 | 84 | 88 | 79 | 92 | 102 |
| 320-73077-3 | PWS1105-OS-042621-100 | 91 | 81 | 87 | 84 | 80 | 76 | 86 | 70 |
| 320-73077-5 | PWS-FD02-042621 | 97 | 95 | 102 | 89 | 97 | 90 | 95 | 81 |
| 320-73077-6 | PWS1182-OS-042621-100 | 86 | 82 | 90 | 85 | 89 | 83 | 88 | 129 |
| 320-73077-8 | PWS1200-OS-042621-100 | 90 | 90 | 91 | 87 | 80 | 83 | 88 | 78 |
| 320-73077-10 | PWS1104-OS-042621-100 | 93 | 88 | 94 | 82 | 81 | 83 | 82 | 89 |
| 320-73077-12 | PWS1167-OS-042621-100 | 102 | 85 | 96 | 88 | 85 | 87 | 90 | 83 |
| 320-73077-14 | PWS1097-OS-042621-100 | 103 | 95 | 103 | 89 | 90 | 91 | 96 | 86 |
| 320-73077-16 | PWS1005-OS-042721-100 | 95 | 93 | 89 | 84 | 93 | 84 | 85 | 117 |
| 320-73077-18 | PWS-FD01-042721 | 99 | 100 | 98 | 81 | 84 | 81 | 90 | 118 |
| 320-73077-19 | PWS1080-IS-042721-100 | 98 | 97 | 100 | 90 | 89 | 90 | 96 | 89 |
| 320-73077-21 | PWS1052-OS-042721-100 | 92 | 83 | 94 | 90 | 98 | 95 | 101 | 120 |
| 320-73077-21 MS | PWS-MS01-042721 | 71 | 66 | 72 | 72 | 78 | 74 | 78 | 102 |
| 320-73077-21 MSD | PWS-MSD01-042721 | 75 | 71 | 79 | 79 | 87 | 87 | 86 | 104 |
| 320-73077-23 | PWS1042-OS-042721-100 | 65 | 64 | 73 | 65 | 67 | 69 | 69 | 80 |
| 320-73077-25 | PWS1071-IS-042721-100 | 70 | 66 | 69 | 67 | 68 | 67 | 72 | 88 |
| 320-73077-27 | PWS1010-IS-042721-100 | 76 | 72 | 84 | 74 | 82 | 83 | 88 | 122 |
| 320-73077-29 | PWS1066-OS-042721-100 | 85 | 84 | 87 | 85 | 90 | 88 | 93 | 104 |
| 320-73077-31 | PWS1091-OS-042721-100 | 104 | 89 | 97 | 101 | 106 | 101 | 115 | 116 |
| 320-73077-33 | PWS-FD02-042721 | 77 | 76 | 82 | 80 | 84 | 84 | 87 | 94 |
| 320-73077-34 | PWS1187-OS-042721-100 | 90 | 87 | 92 | 55 | 70 | 80 | 87 | 107 |
| 320-73077-36 | PWS1086-OS-042721-100 | 75 | 73 | 73 | 72 | 81 | 73 | 78 | 89 |
| 320-73077-38 | PWS1099-OS-042721-100 | 88 | 84 | 91 | 90 | 95 | 97 | 98 | 113 |
| 320-73077-40 | PWS1096-OS-042721-100 | 101 | 101 | 107 | 92 | 97 | 103 | 98 | 86 |
| 320-73077-42 | PWS1090-OS-042721-100 | 100 | 108 | 109 | 86 | 98 | 97 | 99 | 85 |
| 320-73077-44 | PWS1098-OS-042721-100 | 100 | 98 | 101 | 88 | 93 | 101 | 99 | 97 |
| 320-73077-46 | PWS1093-OS-042721-100 | 98 | 99 | 106 | 81 | 90 | 94 | 99 | 84 |
| 320-73077-48 | PWS1094-OS-042721-100 | 103 | 105 | 108 | 88 | 99 | 102 | 106 | 95 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-73077-50 | PWS1121-OS-042721-100 | 88 | 83 | 78 | 71 | 81 | 83 | 90 | 83 |
| 320-73077-52 | PWS1129-OS-042821-100 | 105 | 104 | 108 | 88 | 101 | 97 | 104 | 89 |
| 320-73077-54 | PWS-FD01-042821 | 98 | 97 | 98 | 87 | 93 | 96 | 98 | 93 |
| 320-73077-55 | PWS1115-OS-042821-100 | 111 | 104 | 112 | 94 | 96 | 103 | 108 | 109 |
| 320-73077-57 | PWS1001-OS-042821-100 | 110 | 101 | 104 | 81 | 89 | 99 | 99 | 99 |
| 320-73077-59 | PWS1082-OS-042821-100 | 105 | 103 | 103 | 84 | 92 | 92 | 96 | 72 |
| 320-73077-61 | PWS1141-OS-042821-100 | 104 | 103 | 103 | 85 | 88 | 92 | 100 | 106 |
| 320-73077-63 | PWS1050-OS-042821-100 | 107 | 104 | 103 | 83 | 99 | 101 | 100 | 98 |
| 320-73077-65 | PWS1095-IS-042821-100 | 98 | 93 | 94 | 82 | 91 | 91 | 93 | 80 |
| 320-73077-67 | PWS1111-OS-042821-100 | 98 | 95 | 100 | 84 | 91 | 97 | 99 | 95 |
| 320-73077-69 | PWS1085-OS-042821-100 | 86 | 85 | 96 | 80 | 85 | 81 | 86 | 75 |
| 320-73077-69 MS | PWS-MS02-042821 | 98 | 93 | 106 | 90 | 92 | 85 | 85 | 79 |
| 320-73077-69 MSD | PWS-MSD02-042821 | 96 | 96 | 105 | 90 | 92 | 87 | 89 | 92 |
| 320-73077-71 | PWS1118-OS-042821-100 | 92 | 81 | 91 | 81 | 84 | 81 | 80 | 108 |
| 320-73077-73 | PWS-FD02-042821 | 106 | 89 | 100 | 92 | 97 | 88 | 91 | 132 |
| 320-73077-74 | PWS1084-OS-042821-100 | 93 | 94 | 92 | 76 | 77 | 75 | 81 | 77 |
| 320-73077-76 | PWS1164-IS-042821-100 | 112 | 98 | 107 | 91 | 96 | 90 | 95 | 117 |
| 320-73077-78 | PWS1199-IS-042821-100 | 93 | 85 | 86 | 83 | 83 | 77 | 90 | 101 |
| 320-73077-80 | PWS1150-OS-042821-100 | 104 | 96 | 99 | 86 | 96 | 83 | 93 | 96 |
| 320-73077-82 | PWS1158-OS-042821-100 | 91 | 92 | 95 | 82 | 86 | 78 | 86 | 93 |
| 320-73077-84 | PWS1177-OS-042821-100 | 101 | 92 | 97 | 91 | 97 | 86 | 96 | 96 |
| 320-73077-86 | PWS1178-OS-042821-100 | 92 | 90 | 87 | 78 | 79 | 78 | 85 | 120 |
| 320-73077-88 | PWS1102-OS-042821-100 | 88 | 92 | 93 | 84 | 89 | 78 | 82 | 80 |
| 320-73077-90 | PWS1186-IS-042821-100 | 95 | 99 | 93 | 72 | 79 | 74 | 78 | 116 |
| LCS 320-485558/2-A | Lab Control Sample | 103 | 103 | 102 | 86 | 89 | 88 | 87 | 77 |
| LCS 320-485967/2-A | Lab Control Sample | 95 | 94 | 96 | 92 | 98 | 96 | 92 | 92 |
| LCS 320-485969/2-A | Lab Control Sample | 99 | 89 | 92 | 79 | 88 | 83 | 79 | 75 |
| LCS 320-487624/2-A | Lab Control Sample | 76 | 68 | 78 | 80 | 80 | 81 | 77 | 93 |
| LCS 320-487960/2-A | Lab Control Sample | 87 | 79 | 77 | 79 | 80 | 86 | 86 | 64 |
| LCSD 320-485967/3-A | Lab Control Sample Dup | 98 | 96 | 93 | 91 | 99 | 95 | 96 | 91 |
| LCSD 320-487960/3-A | Lab Control Sample Dup | 67 | 60 | 60 | 60 | 68 | 65 | 65 | 57 |
| MB 320-485558/1-A | Method Blank | 107 | 114 | 114 | 99 | 97 | 95 | 89 | 89 |
| MB 320-485967/1-A | Method Blank | 96 | 94 | 95 | 90 | 93 | 98 | 94 | 99 |
| MB 320-485969/1-A | Method Blank | 89 | 85 | 87 | 81 | 83 | 74 | 78 | 75 |
| MB 320-487624/1-A | Method Blank | 102 | 94 | 105 | 105 | 109 | 110 | 116 | 135 |
| MB 320-487960/1-A | Method Blank | 68 | 62 | 58 | 57 | 65 | 66 | 66 | 56 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOSA (25-150) | d5NEFOSA (25-150) | dMeFOSAA (10-150) | dEtFOSAA (10-150) |
| 320-73077-1 | PWS1132-OS-042621-100 | 92 | 97 | 73 | 80 | 69 | 79 | 64 | 65 |
| 320-73077-1 MS | PWS-MS02-042621 | 87 | 84 | 75 | 93 | 79 | 80 | 75 | 68 |
| 320-73077-1 MSD | PWS-MSD02-042621 | 86 | 94 | 74 | 90 | 79 | 75 | 72 | 72 |
| 320-73077-3 | PWS1105-OS-042621-100 | 73 | 88 | 70 | 87 | 80 | 81 | 71 | 65 |
| 320-73077-5 | PWS-FD02-042621 | 87 | 98 | 83 | 96 | 85 | 91 | 80 | 71 |
| 320-73077-6 | PWS1182-OS-042621-100 | 99 | 107 | 84 | 88 | 64 | 68 | 72 | 68 |
| 320-73077-8 | PWS1200-OS-042621-100 | 93 | 89 | 82 | 92 | 68 | 74 | 73 | 70 |
| 320-73077-10 | PWS1104-OS-042621-100 | 86 | 80 | 75 | 86 | 72 | 83 | 72 | 68 |
| 320-73077-12 | PWS1167-OS-042621-100 | 85 | 102 | 78 | 96 | 77 | 77 | 69 | 63 |
| 320-73077-14 | PWS1097-OS-042621-100 | 93 | 95 | 86 | 96 | 82 | 82 | 77 | 75 |
| 320-73077-16 | PWS1005-OS-042721-100 | 101 | 94 | 75 | 85 | 78 | 75 | 74 | 70 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOSA (25-150) | d5NEFOSA (25-150) | dMeFOSAA (10-150) | dEtFOSAA (10-150) |
| 320-73077-18 | PWS-FD01-042721 | 98 | 77 | 77 | 89 | 67 | 70 | 76 | 75 |
| 320-73077-19 | PWS1080-IS-042721-100 | 89 | 85 | 89 | 99 | 81 | 76 | 81 | 76 |
| 320-73077-21 | PWS1052-OS-042721-100 | 112 | 104 | 96 | 89 | 99 | 96 | 77 | 66 |
| 320-73077-21 MS | PWS-MS01-042721 | 81 | 81 | 84 | 70 | 77 | 73 | 61 | 57 |
| 320-73077-21 MSD | PWS-MSD01-042721 | 102 | 91 | 89 | 79 | 84 | 85 | 70 | 63 |
| 320-73077-23 | PWS1042-OS-042721-100 | 87 | 78 | 79 | 65 | 72 | 71 | 56 | 50 |
| 320-73077-25 | PWS1071-IS-042721-100 | 88 | 78 | 78 | 64 | 74 | 78 | 60 | 52 |
| 320-73077-27 | PWS1010-IS-042721-100 | 116 | 97 | 91 | 74 | 92 | 86 | 72 | 67 |
| 320-73077-29 | PWS1066-OS-042721-100 | 100 | 101 | 100 | 80 | 90 | 92 | 77 | 70 |
| 320-73077-31 | PWS1091-OS-042721-100 | 115 | 118 | 111 | 96 | 109 | 107 | 89 | 80 |
| 320-73077-33 | PWS-FD02-042721 | 99 | 92 | 94 | 75 | 88 | 92 | 68 | 61 |
| 320-73077-34 | PWS1187-OS-042721-100 | 108 | 120 | 98 | 64 | 96 | 96 | 64 | 64 |
| 320-73077-36 | PWS1086-OS-042721-100 | 85 | 85 | 86 | 70 | 76 | 83 | 63 | 55 |
| 320-73077-38 | PWS1099-OS-042721-100 | 111 | 105 | 106 | 86 | 99 | 104 | 77 | 66 |
| 320-73077-40 | PWS1096-OS-042721-100 | 109 | 111 | 122 | 86 | 91 | 97 | 79 | 84 |
| 320-73077-42 | PWS1090-OS-042721-100 | 104 | 111 | 122 | 92 | 93 | 106 | 88 | 92 |
| 320-73077-44 | PWS1098-OS-042721-100 | 114 | 114 | 111 | 88 | 89 | 113 | 82 | 79 |
| 320-73077-46 | PWS1093-OS-042721-100 | 114 | 105 | 108 | 91 | 86 | 105 | 79 | 78 |
| 320-73077-48 | PWS1094-OS-042721-100 | 109 | 112 | 118 | 89 | 94 | 103 | 86 | 90 |
| 320-73077-50 | PWS1121-OS-042721-100 | 100 | 109 | 88 | 84 | 99 | 97 | 64 | 54 |
| 320-73077-52 | PWS1129-OS-042821-100 | 119 | 111 | 123 | 94 | 93 | 102 | 82 | 79 |
| 320-73077-54 | PWS-FD01-042821 | 108 | 97 | 115 | 88 | 91 | 110 | 82 | 83 |
| 320-73077-55 | PWS1115-OS-042821-100 | 108 | 118 | 123 | 88 | 96 | 104 | 87 | 91 |
| 320-73077-57 | PWS1001-OS-042821-100 | 124 | 110 | 134 | 89 | 88 | 110 | 82 | 86 |
| 320-73077-59 | PWS1082-OS-042821-100 | 112 | 102 | 122 | 87 | 91 | 109 | 84 | 81 |
| 320-73077-61 | PWS1141-OS-042821-100 | 117 | 113 | 114 | 86 | 90 | 104 | 79 | 89 |
| 320-73077-63 | PWS1050-OS-042821-100 | 105 | 108 | 122 | 95 | 94 | 104 | 73 | 84 |
| 320-73077-65 | PWS1095-IS-042821-100 | 103 | 102 | 108 | 79 | 84 | 100 | 79 | 78 |
| 320-73077-67 | PWS1111-OS-042821-100 | 108 | 111 | 110 | 95 | 89 | 102 | 82 | 84 |
| 320-73077-69 | PWS1085-OS-042821-100 | 91 | 92 | 85 | 86 | 72 | 74 | 69 | 67 |
| 320-73077-69 MS | PWS-MS02-042821 | 76 | 69 | 69 | 93 | 71 | 62 | 79 | 77 |
| 320-73077-69 MSD | PWS-MSD02-042821 | 78 | 76 | 74 | 93 | 71 | 72 | 74 | 75 |
| 320-73077-71 | PWS1118-OS-042821-100 | 102 | 100 | 77 | 89 | 83 | 82 | 70 | 69 |
| 320-73077-73 | PWS-FD02-042821 | 92 | 102 | 82 | 98 | 84 | 76 | 77 | 75 |
| 320-73077-74 | PWS1084-OS-042821-100 | 89 | 89 | 76 | 88 | 75 | 76 | 69 | 67 |
| 320-73077-76 | PWS1164-IS-042821-100 | 91 | 77 | 82 | 96 | 70 | 74 | 78 | 80 |
| 320-73077-78 | PWS1199-IS-042821-100 | 98 | 89 | 76 | 88 | 74 | 75 | 71 | 68 |
| 320-73077-80 | PWS1150-OS-042821-100 | 85 | 76 | 80 | 88 | 73 | 71 | 78 | 74 |
| 320-73077-82 | PWS1158-OS-042821-100 | 84 | 83 | 78 | 90 | 74 | 78 | 68 | 64 |
| 320-73077-84 | PWS1177-OS-042821-100 | 90 | 85 | 81 | 97 | 80 | 83 | 76 | 73 |
| 320-73077-86 | PWS1178-OS-042821-100 | 89 | 70 | 71 | 84 | 58 | 61 | 65 | 67 |
| 320-73077-88 | PWS1102-OS-042821-100 | 80 | 88 | 83 | 93 | 82 | 80 | 71 | 74 |
| 320-73077-90 | PWS1186-IS-042821-100 | 89 | 67 | 67 | 85 | 71 | 65 | 70 | 68 |
| LCS 320-485558/2-A | Lab Control Sample | 78 | 67 | 75 | 100 | 65 | 67 | 74 | 73 |
| LCS 320-485967/2-A | Lab Control Sample | 103 | 117 | 110 | 91 | 86 | 96 | 72 | 80 |
| LCS 320-485969/2-A | Lab Control Sample | 76 | 75 | 74 | 92 | 69 | 74 | 65 | 71 |
| LCS 320-487624/2-A | Lab Control Sample | 91 | 89 | 80 | 73 | 84 | 77 | 61 | 58 |
| LCS 320-487960/2-A | Lab Control Sample | 86 | 108 | 91 | 87 | 99 | 99 | 67 | 68 |
| LCSD 320-485967/3-A | Lab Control Sample Dup | 110 | 104 | 111 | 97 | 95 | 106 | 80 | 80 |
| LCSD 320-487960/3-A | Lab Control Sample Dup | 66 | 76 | 63 | 65 | 76 | 71 | 52 | 53 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| MB 320-485558/1-A | Method Blank | 92 | 78 | 93 | 99 | 74 | 74 | 77 | 76 |
| MB 320-485967/1-A | Method Blank | 109 | 119 | 122 | 89 | 92 | 106 | 80 | 85 |
| MB 320-485969/1-A | Method Blank | 80 | 81 | 82 | 89 | 73 | 73 | 65 | 67 |
| MB 320-487624/1-A | Method Blank | 133 | 128 | 122 | 100 | 119 | 120 | 88 | 87 |
| MB 320-487960/1-A | Method Blank | 73 | 81 | 66 | 62 | 80 | 74 | 50 | 47 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) |
| 320-73077-1 | PWS1132-OS-042621-100 | 92 | 87 |
| 320-73077-1 MS | PWS-MS02-042621 | 101 | 97 |
| 320-73077-1 MSD | PWS-MSD02-042621 | 95 | 93 |
| 320-73077-3 | PWS1105-OS-042621-100 | 93 | 90 |
| 320-73077-5 | PWS-FD02-042621 | 111 | 99 |
| 320-73077-6 | PWS1182-OS-042621-100 | 76 | 91 |
| 320-73077-8 | PWS1200-OS-042621-100 | 93 | 91 |
| 320-73077-10 | PWS1104-OS-042621-100 | 101 | 95 |
| 320-73077-12 | PWS1167-OS-042621-100 | 95 | 95 |
| 320-73077-14 | PWS1097-OS-042621-100 | 110 | 96 |
| 320-73077-16 | PWS1005-OS-042721-100 | 97 | 89 |
| 320-73077-18 | PWS-FD01-042721 | 77 | 76 |
| 320-73077-19 | PWS1080-IS-042721-100 | 102 | 95 |
| 320-73077-21 | PWS1052-OS-042721-100 | 92 | 85 |
| 320-73077-21 MS | PWS-MS01-042721 | 74 | 70 |
| 320-73077-21 MSD | PWS-MSD01-042721 | 82 | 79 |
| 320-73077-23 | PWS1042-OS-042721-100 | 62 | 65 |
| 320-73077-25 | PWS1071-IS-042721-100 | 71 | 67 |
| 320-73077-27 | PWS1010-IS-042721-100 | 73 | 72 |
| 320-73077-29 | PWS1066-OS-042721-100 | 90 | 87 |
| 320-73077-31 | PWS1091-OS-042721-100 | 103 | 100 |
| 320-73077-33 | PWS-FD02-042721 | 86 | 81 |
| 320-73077-34 | PWS1187-OS-042721-100 | 83 | 77 |
| 320-73077-36 | PWS1086-OS-042721-100 | 77 | 73 |
| 320-73077-38 | PWS1099-OS-042721-100 | 94 | 93 |
| 320-73077-40 | PWS1096-OS-042721-100 | 87 | 96 |
| 320-73077-42 | PWS1090-OS-042721-100 | 94 | 101 |
| 320-73077-44 | PWS1098-OS-042721-100 | 86 | 95 |
| 320-73077-46 | PWS1093-OS-042721-100 | 81 | 89 |
| 320-73077-48 | PWS1094-OS-042721-100 | 97 | 98 |
| 320-73077-50 | PWS1121-OS-042721-100 | 78 | 80 |
| 320-73077-52 | PWS1129-OS-042821-100 | 89 | 101 |
| 320-73077-54 | PWS-FD01-042821 | 95 | 97 |
| 320-73077-55 | PWS1115-OS-042821-100 | 98 | 107 |
| 320-73077-57 | PWS1001-OS-042821-100 | 97 | 95 |
| 320-73077-59 | PWS1082-OS-042821-100 | 94 | 98 |
| 320-73077-61 | PWS1141-OS-042821-100 | 98 | 93 |
| 320-73077-63 | PWS1050-OS-042821-100 | 87 | 96 |
| 320-73077-65 | PWS1095-IS-042821-100 | 83 | 87 |
| 320-73077-67 | PWS1111-OS-042821-100 | 93 | 95 |
| 320-73077-69 | PWS1085-OS-042821-100 | 95 | 92 |
| 320-73077-69 MS | PWS-MS02-042821 | 84 | 80 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | | | |
| 320-73077-69 MSD | PWS-MSD02-042821 | 85 | 86 | | | | | | | | | | |
| 320-73077-71 | PWS1118-OS-042821-100 | 96 | 90 | | | | | | | | | | |
| 320-73077-73 | PWS-FD02-042821 | 102 | 98 | | | | | | | | | | |
| 320-73077-74 | PWS1084-OS-042821-100 | 98 | 94 | | | | | | | | | | |
| 320-73077-76 | PWS1164-IS-042821-100 | 92 | 84 | | | | | | | | | | |
| 320-73077-78 | PWS1199-IS-042821-100 | 93 | 90 | | | | | | | | | | |
| 320-73077-80 | PWS1150-OS-042821-100 | 93 | 78 | | | | | | | | | | |
| 320-73077-82 | PWS1158-OS-042821-100 | 87 | 87 | | | | | | | | | | |
| 320-73077-84 | PWS1177-OS-042821-100 | 97 | 99 | | | | | | | | | | |
| 320-73077-86 | PWS1178-OS-042821-100 | 73 | 74 | | | | | | | | | | |
| 320-73077-88 | PWS1102-OS-042821-100 | 96 | 93 | | | | | | | | | | |
| 320-73077-90 | PWS1186-IS-042821-100 | 78 | 67 | | | | | | | | | | |
| LCS 320-485558/2-A | Lab Control Sample | 86 | 78 | | | | | | | | | | |
| LCS 320-485967/2-A | Lab Control Sample | 83 | 98 | | | | | | | | | | |
| LCS 320-485969/2-A | Lab Control Sample | 96 | 88 | | | | | | | | | | |
| LCS 320-487624/2-A | Lab Control Sample | 74 | 68 | | | | | | | | | | |
| LCS 320-487960/2-A | Lab Control Sample | 84 | 86 | | | | | | | | | | |
| LCSD 320-485967/3-A | Lab Control Sample Dup | 94 | 95 | | | | | | | | | | |
| LCSD 320-487960/3-A | Lab Control Sample Dup | 66 | 64 | | | | | | | | | | |
| MB 320-485558/1-A | Method Blank | 87 | 81 | | | | | | | | | | |
| MB 320-485967/1-A | Method Blank | 89 | 96 | | | | | | | | | | |
| MB 320-485969/1-A | Method Blank | 94 | 89 | | | | | | | | | | |
| MB 320-487624/1-A | Method Blank | 116 | 107 | | | | | | | | | | |
| MB 320-487960/1-A | Method Blank | 68 | 61 | | | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-485558/1-A**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | 0.589 | J | 2.0 | 0.54 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/04/21 04:30 | 05/06/21 01:00 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |
| *13C5 PFPeA* | *106* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |
| *13C5 PFNA* | *107* | | *25 - 150* | *05/04/21 04:30* | *05/06/21 01:00* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485558/1-A**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 111 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C2 PFUnA | 104 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C2 PFDoA | 107 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C2 PFTeDA | 114 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C2 PFHxDA | 114 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C3 PFBS | 99 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 18O2 PFHxS | 97 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C4 PFOS | 95 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C8 FOSA | 89 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| M2-4:2 FTS | 89 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| M2-6:2 FTS | 92 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| M2-8:2 FTS | 78 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C2 10:2 FTS | 93 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| 13C3 HFPO-DA | 99 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d3-NMeFOSAA | 74 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d5-NEtFOSAA | 74 | | 25 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d-N-MeFOSA-M | 77 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d7-N-MeFOSE-M | 87 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 05/04/21 04:30 | 05/06/21 01:00 | 1 |

**Lab Sample ID: LCS 320-485558/2-A**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 39.2 | | ng/L | | 98 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 45.1 | | ng/L | | 113 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 38.4 | | ng/L | | 96 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 37.0 | | ng/L | | 93 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.7 | | ng/L | | 107 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 43.9 | | ng/L | | 117 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.2 | | ng/L | | 102 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485558/2-A**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 36.6 | | ng/L | | 96 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 37.8 | | ng/L | | 102 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 34.4 | | ng/L | | 90 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 36.5 | | ng/L | | 95 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.7 | | ng/L | | 105 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 |
| NMeFOSA | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| NEtFOSA | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| NMeFOSAA | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| NEtFOSAA | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| NMeFOSE | 40.0 | 39.4 | | ng/L | | 99 | 60 - 135 |
| NEtFOSE | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 |
| 4:2 FTS | 37.4 | 39.5 | | ng/L | | 106 | 60 - 135 |
| 6:2 FTS | 37.9 | 46.2 | | ng/L | | 122 | 60 - 135 |
| 8:2 FTS | 38.3 | 45.2 | | ng/L | | 118 | 60 - 135 |
| 10:2 FTS | 38.6 | 39.2 | | ng/L | | 102 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 |
| F-53B Major | 37.3 | 39.2 | | ng/L | | 105 | 60 - 135 |
| F-53B Minor | 37.7 | 40.1 | | ng/L | | 106 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 43.1 | | ng/L | | 114 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* |
| *13C5 PFPeA* | *96* | | *25 - 150* |
| *13C2 PFHxA* | *105* | | *25 - 150* |
| *13C4 PFHpA* | *106* | | *25 - 150* |
| *13C4 PFOA* | *101* | | *25 - 150* |
| *13C5 PFNA* | *92* | | *25 - 150* |
| *13C2 PFDA* | *88* | | *25 - 150* |
| *13C2 PFUnA* | *107* | | *25 - 150* |
| *13C2 PFDoA* | *103* | | *25 - 150* |
| *13C2 PFTeDA* | *103* | | *25 - 150* |
| *13C2 PFHxDA* | *102* | | *25 - 150* |
| *13C3 PFBS* | *86* | | *25 - 150* |
| *18O2 PFHxS* | *89* | | *25 - 150* |
| *13C4 PFOS* | *88* | | *25 - 150* |
| *13C8 FOSA* | *87* | | *10 - 150* |
| *M2-4:2 FTS* | *77* | | *25 - 150* |
| *M2-6:2 FTS* | *78* | | *25 - 150* |
| *M2-8:2 FTS* | *67* | | *25 - 150* |
| *13C2 10:2 FTS* | *75* | | *25 - 150* |
| *13C3 HFPO-DA* | *100* | | *25 - 150* |
| *d3-NMeFOSAA* | *65* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485558/2-A**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *67* | | *25 - 150* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *78* | | *10 - 150* |

**Lab Sample ID: 320-73077-1 MS**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: PWS-MS02-042621**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.3 | | 37.0 | 43.6 | | ng/L | | 98 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 4.5 | | 37.0 | 38.5 | | ng/L | | 92 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 6.6 | | 37.0 | 41.9 | | ng/L | | 95 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 4.3 | | 37.0 | 42.1 | | ng/L | | 102 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 12 | | 37.0 | 51.9 | | ng/L | | 109 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 37.0 | 35.5 | | ng/L | | 96 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.0 | 36.3 | | ng/L | | 98 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.0 | 36.6 | | ng/L | | 99 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.0 | 40.2 | | ng/L | | 109 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.0 | 33.2 | | ng/L | | 90 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.0 | 38.9 | | ng/L | | 105 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.0 | 40.1 | | ng/L | | 108 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.0 | 37.7 | | ng/L | | 102 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 32.7 | 37.7 | | ng/L | | 100 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 34.7 | 34.6 | | ng/L | | 96 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 4.5 | | 33.7 | 40.3 | | ng/L | | 106 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.47 | J | 35.2 | 36.2 | | ng/L | | 101 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 15 | B | 34.3 | 50.0 | | ng/L | | 101 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.5 | 34.6 | | ng/L | | 97 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.7 | 37.1 | | ng/L | | 104 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.8 | 36.2 | | ng/L | | 101 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 37.0 | 38.5 | | ng/L | | 101 | 70 - 130 |
| NMeFOSA | ND | | 37.0 | 34.8 | | ng/L | | 94 | 70 - 130 |
| NEtFOSA | ND | | 37.0 | 39.5 | | ng/L | | 107 | 70 - 130 |
| NMeFOSAA | ND | | 37.0 | 35.8 | | ng/L | | 97 | 70 - 130 |
| NEtFOSAA | ND | | 37.0 | 39.2 | | ng/L | | 106 | 70 - 130 |
| NMeFOSE | ND | | 37.0 | 40.6 | | ng/L | | 110 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-1 MS**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: PWS-MS02-042621**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 37.0 | 34.8 | | ng/L | | 94 | 70 - 130 |
| 4:2 FTS | ND | | 34.6 | 34.8 | | ng/L | | 101 | 70 - 130 |
| 6:2 FTS | ND | | 35.1 | 38.5 | | ng/L | | 110 | 70 - 130 |
| 8:2 FTS | ND | | 35.5 | 40.5 | | ng/L | | 114 | 70 - 130 |
| 10:2 FTS | ND | | 35.7 | 36.4 | | ng/L | | 102 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 37.0 | 38.1 | | ng/L | | 103 | 70 - 130 |
| F-53B Major | ND | | 34.5 | 38.7 | | ng/L | | 112 | 70 - 130 |
| F-53B Minor | ND | | 34.9 | 37.1 | | ng/L | | 107 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.9 | 39.3 | | ng/L | | 113 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* |
| *13C5 PFPeA* | *99* | | *25 - 150* |
| *13C2 PFHxA* | *99* | | *25 - 150* |
| *13C4 PFHpA* | *107* | | *25 - 150* |
| *13C4 PFOA* | *95* | | *25 - 150* |
| *13C5 PFNA* | *100* | | *25 - 150* |
| *13C2 PFDA* | *94* | | *25 - 150* |
| *13C2 PFUnA* | *105* | | *25 - 150* |
| *13C2 PFDoA* | *96* | | *25 - 150* |
| *13C2 PFTeDA* | *94* | | *25 - 150* |
| *13C2 PFHxDA* | *103* | | *25 - 150* |
| *13C3 PFBS* | *92* | | *25 - 150* |
| *18O2 PFHxS* | *81* | | *25 - 150* |
| *13C4 PFOS* | *84* | | *25 - 150* |
| *13C8 FOSA* | *85* | | *10 - 150* |
| *M2-4:2 FTS* | *98* | | *25 - 150* |
| *M2-6:2 FTS* | *87* | | *25 - 150* |
| *M2-8:2 FTS* | *84* | | *25 - 150* |
| *13C2 10:2 FTS* | *75* | | *25 - 150* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* |
| *d5-NEtFOSAA* | *80* | | *25 - 150* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *101* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *97* | | *10 - 150* |

**Lab Sample ID: 320-73077-1 MSD**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: PWS-MSD02-042621**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.3 | | 37.0 | 44.5 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | 4.5 | | 37.0 | 42.7 | | ng/L | | 103 | 70 - 130 | 11 | 30 |
| Perfluorohexanoic acid (PFHxA) | 6.6 | | 37.0 | 43.2 | | ng/L | | 99 | 70 - 130 | 3 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 4.3 | | 37.0 | 43.5 | | ng/L | | 106 | 70 - 130 | 3 | 30 |
| Perfluorooctanoic acid (PFOA) | 12 | | 37.0 | 54.4 | | ng/L | | 116 | 70 - 130 | 5 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-1 MSD**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: PWS-MSD02-042621**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 37.0 | 39.0 | | ng/L | | 105 | 70 - 130 | 10 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.0 | 34.3 | | ng/L | | 93 | 70 - 130 | 6 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.0 | 33.7 | | ng/L | | 91 | 70 - 130 | 8 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.0 | 39.4 | | ng/L | | 106 | 70 - 130 | 2 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.0 | 39.5 | | ng/L | | 107 | 70 - 130 | 17 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.0 | 36.1 | | ng/L | | 97 | 70 - 130 | 8 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.0 | 41.8 | | ng/L | | 113 | 70 - 130 | 4 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.0 | 39.8 | | ng/L | | 107 | 70 - 130 | 5 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 32.7 | 35.9 | | ng/L | | 94 | 70 - 130 | 5 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 34.7 | 36.8 | | ng/L | | 103 | 70 - 130 | 6 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 4.5 | | 33.7 | 38.1 | | ng/L | | 100 | 70 - 130 | 6 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.47 | J | 35.3 | 39.6 | | ng/L | | 111 | 70 - 130 | 9 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 15 | B | 34.4 | 53.5 | | ng/L | | 111 | 70 - 130 | 7 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.6 | 36.4 | | ng/L | | 102 | 70 - 130 | 5 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.7 | 34.7 | | ng/L | | 97 | 70 - 130 | 7 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.9 | 36.2 | | ng/L | | 101 | 70 - 130 | 0 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 37.0 | 36.1 | | ng/L | | 94 | 70 - 130 | 6 | 30 |
| NMeFOSA | ND | | 37.0 | 37.7 | | ng/L | | 102 | 70 - 130 | 8 | 30 |
| NEtFOSA | ND | | 37.0 | 36.5 | | ng/L | | 99 | 70 - 130 | 8 | 30 |
| NMeFOSAA | ND | | 37.0 | 38.7 | | ng/L | | 104 | 70 - 130 | 8 | 30 |
| NEtFOSAA | ND | | 37.0 | 38.2 | | ng/L | | 103 | 70 - 130 | 3 | 30 |
| NMeFOSE | ND | | 37.0 | 35.6 | | ng/L | | 96 | 70 - 130 | 13 | 30 |
| NEtFOSE | ND | | 37.0 | 37.7 | | ng/L | | 102 | 70 - 130 | 8 | 30 |
| 4:2 FTS | ND | | 34.6 | 35.1 | | ng/L | | 101 | 70 - 130 | 1 | 30 |
| 6:2 FTS | ND | | 35.1 | 42.6 | | ng/L | | 121 | 70 - 130 | 10 | 30 |
| 8:2 FTS | ND | | 35.5 | 36.0 | | ng/L | | 101 | 70 - 130 | 12 | 30 |
| 10:2 FTS | ND | | 35.7 | 35.0 | | ng/L | | 98 | 70 - 130 | 4 | 30 |
| HFPO-DA (GenX) | ND | | 37.0 | 37.4 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| F-53B Major | ND | | 34.5 | 38.7 | | ng/L | | 112 | 70 - 130 | 0 | 30 |
| F-53B Minor | ND | | 34.9 | 37.7 | | ng/L | | 108 | 70 - 130 | 2 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.9 | 40.7 | | ng/L | | 117 | 70 - 130 | 3 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *83* | | *25 - 150* |
| *13C5 PFPeA* | *89* | | *25 - 150* |
| *13C2 PFHxA* | *95* | | *25 - 150* |
| *13C4 PFHpA* | *93* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-1 MSD**
**Matrix: Water**
**Analysis Batch: 486313**

**Client Sample ID: PWS-MSD02-042621**
**Prep Type: Total/NA**
**Prep Batch: 485558**

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFOA* | *97* | | *25 - 150* |
| *13C5 PFNA* | *89* | | *25 - 150* |
| *13C2 PFDA* | *100* | | *25 - 150* |
| *13C2 PFUnA* | *94* | | *25 - 150* |
| *13C2 PFDoA* | *89* | | *25 - 150* |
| *13C2 PFTeDA* | *89* | | *25 - 150* |
| *13C2 PFHxDA* | *92* | | *25 - 150* |
| *13C3 PFBS* | *84* | | *25 - 150* |
| *18O2 PFHxS* | *88* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *92* | | *10 - 150* |
| *M2-4:2 FTS* | *102* | | *25 - 150* |
| *M2-6:2 FTS* | *86* | | *25 - 150* |
| *M2-8:2 FTS* | *94* | | *25 - 150* |
| *13C2 10:2 FTS* | *74* | | *25 - 150* |
| *13C3 HFPO-DA* | *90* | | *25 - 150* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* |
| *d5-NEtFOSAA* | *75* | | *25 - 150* |
| *d-N-MeFOSA-M* | *72* | | *10 - 150* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *93* | | *10 - 150* |

**Lab Sample ID: MB 320-485967/1-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485967/1-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| Perfluorooctanesulfonamide (FOSA) | 2.62 | | 2.0 | 0.98 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| NEtFOSE | 1.42 | J | 2.0 | 0.85 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/05/21 04:16 | 05/10/21 20:12 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFUnA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C4 PFOS* | *98* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C8 FOSA* | *94* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *M2-4:2 FTS* | *99* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *M2-6:2 FTS* | *109* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *M2-8:2 FTS* | *119* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d3-NMeFOSAA* | *92* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d5-NEtFOSAA* | *106* | | *25 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d-N-EtFOSA-M* | *85* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d7-N-MeFOSE-M* | *89* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* | *05/05/21 04:16* | *05/10/21 20:12* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485967/2-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 39.0 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 45.7 | | ng/L | | 114 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 45.8 | | ng/L | | 114 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 46.2 | | ng/L | | 116 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 45.5 | | ng/L | | 114 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 39.4 | | ng/L | | 112 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 40.3 | | ng/L | | 107 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.6 | | ng/L | | 95 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 44.6 | | ng/L | | 117 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.5 | | ng/L | | 106 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 38.1 | | ng/L | | 99 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 41.5 | | ng/L | | 108 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 41.8 | | ng/L | | 108 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 47.0 | | ng/L | | 118 | 60 - 135 |
| NMeFOSA | 40.0 | 53.7 | | ng/L | | 134 | 60 - 135 |
| NEtFOSA | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 |
| NMeFOSAA | 40.0 | 51.0 | | ng/L | | 127 | 60 - 135 |
| NEtFOSAA | 40.0 | 47.0 | | ng/L | | 117 | 60 - 135 |
| NMeFOSE | 40.0 | 45.5 | | ng/L | | 114 | 60 - 135 |
| NEtFOSE | 40.0 | 34.8 | | ng/L | | 87 | 60 - 135 |
| 4:2 FTS | 37.4 | 38.8 | | ng/L | | 104 | 60 - 135 |
| 6:2 FTS | 37.9 | 44.4 | | ng/L | | 117 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.4 | | ng/L | | 105 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.7 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 |
| F-53B Major | 37.3 | 41.0 | | ng/L | | 110 | 60 - 135 |
| F-53B Minor | 37.7 | 38.2 | | ng/L | | 101 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 40.4 | | ng/L | | 107 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 100 | | 25 - 150 |
| 13C5 PFPeA | 98 | | 25 - 150 |
| 13C2 PFHxA | 89 | | 25 - 150 |
| 13C4 PFHpA | 92 | | 25 - 150 |
| 13C4 PFOA | 96 | | 25 - 150 |
| 13C5 PFNA | 98 | | 25 - 150 |
| 13C2 PFDA | 90 | | 25 - 150 |
| 13C2 PFUnA | 90 | | 25 - 150 |
| 13C2 PFDoA | 95 | | 25 - 150 |
| 13C2 PFTeDA | 94 | | 25 - 150 |
| 13C2 PFHxDA | 96 | | 25 - 150 |
| 13C3 PFBS | 92 | | 25 - 150 |
| 18O2 PFHxS | 98 | | 25 - 150 |
| 13C4 PFOS | 96 | | 25 - 150 |
| 13C8 FOSA | 92 | | 10 - 150 |
| M2-4:2 FTS | 92 | | 25 - 150 |
| M2-6:2 FTS | 103 | | 25 - 150 |
| M2-8:2 FTS | 117 | | 25 - 150 |
| 13C2 10:2 FTS | 110 | | 25 - 150 |
| 13C3 HFPO-DA | 91 | | 25 - 150 |
| d3-NMeFOSAA | 86 | | 25 - 150 |
| d5-NEtFOSAA | 96 | | 25 - 150 |
| d-N-MeFOSA-M | 72 | | 10 - 150 |
| d-N-EtFOSA-M | 80 | | 10 - 150 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 |
| d9-N-EtFOSE-M | 98 | | 10 - 150 |

**Lab Sample ID: LCSD 320-485967/3-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 | 9 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 3 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 45.1 | | ng/L | | 113 | 60 - 135 | 1 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 49.2 | | ng/L | | 123 | 60 - 135 | 7 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 45.3 | | ng/L | | 113 | 60 - 135 | 2 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 | 4 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 47.0 | | ng/L | | 117 | 60 - 135 | 10 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 | 3 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 2 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 6 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 45.8 | | ng/L | | 114 | 60 - 135 | 10 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 | 2 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 43.4 | | ng/L | | 109 | 60 - 135 | 0 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 41.5 | | ng/L | | 117 | 60 - 135 | 5 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-485967/3-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 43.0 | | ng/L | | 114 | 60 - 135 | 6 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 36.1 | | ng/L | | 99 | 60 - 135 | 4 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 45.9 | | ng/L | | 121 | 60 - 135 | 3 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 45.0 | | ng/L | | 121 | 60 - 135 | 13 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 37.4 | | ng/L | | 97 | 60 - 135 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 42.5 | | ng/L | | 110 | 60 - 135 | 2 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 40.3 | | ng/L | | 104 | 60 - 135 | 4 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 | 2 | 30 |
| NMeFOSA | | | 40.0 | 46.1 | | ng/L | | 115 | 60 - 135 | 15 | 30 |
| NEtFOSA | | | 40.0 | 45.1 | | ng/L | | 113 | 60 - 135 | 5 | 30 |
| NMeFOSAA | | | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 | 14 | 30 |
| NEtFOSAA | | | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 | 8 | 30 |
| NMeFOSE | | | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 | 11 | 30 |
| NEtFOSE | | | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 | 14 | 30 |
| 4:2 FTS | | | 37.4 | 45.3 | | ng/L | | 121 | 60 - 135 | 15 | 30 |
| 6:2 FTS | | | 37.9 | 43.1 | | ng/L | | 114 | 60 - 135 | 3 | 30 |
| 8:2 FTS | | | 38.3 | 49.3 | | ng/L | | 129 | 60 - 135 | 20 | 30 |
| 10:2 FTS | | | 38.6 | 35.5 | | ng/L | | 92 | 60 - 135 | 3 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 45.6 | | ng/L | | 114 | 60 - 135 | 5 | 30 |
| F-53B Major | | | 37.3 | 43.9 | | ng/L | | 118 | 60 - 135 | 7 | 30 |
| F-53B Minor | | | 37.7 | 41.8 | | ng/L | | 111 | 60 - 135 | 9 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 42.3 | | ng/L | | 112 | 60 - 135 | 5 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* |
| *13C5 PFPeA* | *97* | | *25 - 150* |
| *13C2 PFHxA* | *95* | | *25 - 150* |
| *13C4 PFHpA* | *96* | | *25 - 150* |
| *13C4 PFOA* | *96* | | *25 - 150* |
| *13C5 PFNA* | *105* | | *25 - 150* |
| *13C2 PFDA* | *94* | | *25 - 150* |
| *13C2 PFUnA* | *105* | | *25 - 150* |
| *13C2 PFDoA* | *98* | | *25 - 150* |
| *13C2 PFTeDA* | *96* | | *25 - 150* |
| *13C2 PFHxDA* | *93* | | *25 - 150* |
| *13C3 PFBS* | *91* | | *25 - 150* |
| *18O2 PFHxS* | *99* | | *25 - 150* |
| *13C4 PFOS* | *95* | | *25 - 150* |
| *13C8 FOSA* | *96* | | *10 - 150* |
| *M2-4:2 FTS* | *91* | | *25 - 150* |
| *M2-6:2 FTS* | *110* | | *25 - 150* |
| *M2-8:2 FTS* | *104* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-485967/3-A**
**Matrix: Water**
**Analysis Batch: 487756**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 485967**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 111 | | 25 - 150 |
| 13C3 HFPO-DA | 97 | | 25 - 150 |
| d3-NMeFOSAA | 95 | | 25 - 150 |
| d5-NEtFOSAA | 106 | | 25 - 150 |
| d-N-MeFOSA-M | 80 | | 10 - 150 |
| d-N-EtFOSA-M | 80 | | 10 - 150 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 |
| d9-N-EtFOSE-M | 95 | | 10 - 150 |

**Lab Sample ID: MB 320-485969/1-A**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-485969/1-A**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/05/21 04:32 | 05/06/21 16:33 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *84* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFUnA* | *101* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C4 PFOS* | *74* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C8 FOSA* | *78* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *M2-4:2 FTS* | *75* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *M2-6:2 FTS* | *80* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *M2-8:2 FTS* | *81* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d3-NMeFOSAA* | *73* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d5-NEtFOSAA* | *73* | | *25 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d-N-MeFOSA-M* | *65* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d7-N-MeFOSE-M* | *94* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* | *05/05/21 04:32* | *05/06/21 16:33* | *1* |

**Lab Sample ID: LCS 320-485969/2-A**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 46.7 | | ng/L | | 117 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 44.8 | | ng/L | | 112 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485969/2-A**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorododecanoic acid (PFDoA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 49.3 | | ng/L | | 123 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 47.6 | | ng/L | | 119 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 39.1 | | ng/L | | 111 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 43.8 | | ng/L | | 117 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.7 | | ng/L | | 103 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 37.5 | | ng/L | | 98 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 40.4 | | ng/L | | 109 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.7 | | ng/L | | 103 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 40.9 | | ng/L | | 106 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 46.1 | | ng/L | | 119 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 44.8 | | ng/L | | 112 | 60 - 135 |
| NMeFOSA | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 |
| NEtFOSA | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 |
| NMeFOSAA | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| NEtFOSAA | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| NMeFOSE | 40.0 | 39.2 | | ng/L | | 98 | 60 - 135 |
| NEtFOSE | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| 4:2 FTS | 37.4 | 41.0 | | ng/L | | 110 | 60 - 135 |
| 6:2 FTS | 37.9 | 45.4 | | ng/L | | 120 | 60 - 135 |
| 8:2 FTS | 38.3 | 44.3 | | ng/L | | 115 | 60 - 135 |
| 10:2 FTS | 38.6 | 38.8 | | ng/L | | 101 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| F-53B Major | 37.3 | 42.0 | | ng/L | | 113 | 60 - 135 |
| F-53B Minor | 37.7 | 42.6 | | ng/L | | 113 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 46.2 | | ng/L | | 123 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* |
| *13C5 PFPeA* | *88* | | *25 - 150* |
| *13C2 PFHxA* | *96* | | *25 - 150* |
| *13C4 PFHpA* | *102* | | *25 - 150* |
| *13C4 PFOA* | *96* | | *25 - 150* |
| *13C5 PFNA* | *90* | | *25 - 150* |
| *13C2 PFDA* | *91* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-485969/2-A**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C2 PFUnA | 92 | | 25 - 150 |
| 13C2 PFDoA | 99 | | 25 - 150 |
| 13C2 PFTeDA | 89 | | 25 - 150 |
| 13C2 PFHxDA | 92 | | 25 - 150 |
| 13C3 PFBS | 79 | | 25 - 150 |
| 18O2 PFHxS | 88 | | 25 - 150 |
| 13C4 PFOS | 83 | | 25 - 150 |
| 13C8 FOSA | 79 | | 10 - 150 |
| M2-4:2 FTS | 75 | | 25 - 150 |
| M2-6:2 FTS | 76 | | 25 - 150 |
| M2-8:2 FTS | 75 | | 25 - 150 |
| 13C2 10:2 FTS | 74 | | 25 - 150 |
| 13C3 HFPO-DA | 92 | | 25 - 150 |
| d3-NMeFOSAA | 69 | | 25 - 150 |
| d5-NEtFOSAA | 74 | | 25 - 150 |
| d-N-MeFOSA-M | 65 | | 10 - 150 |
| d-N-EtFOSA-M | 71 | | 10 - 150 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 |
| d9-N-EtFOSE-M | 88 | | 10 - 150 |

**Lab Sample ID: 320-73077-69 MS**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: PWS-MS02-042821**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.4 | J | 37.2 | 41.1 | | ng/L | | 101 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | ND | | 37.2 | 44.0 | | ng/L | | 118 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 0.71 | J | 37.2 | 41.2 | | ng/L | | 109 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 0.33 | J | 37.2 | 43.6 | | ng/L | | 116 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | ND | | 37.2 | 43.2 | | ng/L | | 116 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 0.35 | J | 37.2 | 41.9 | | ng/L | | 112 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | 0.59 | J | 37.2 | 37.9 | | ng/L | | 100 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.2 | 39.4 | | ng/L | | 106 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.2 | 42.4 | | ng/L | | 114 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.2 | 41.9 | | ng/L | | 112 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.2 | 45.5 | | ng/L | | 122 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.2 | 41.5 | | ng/L | | 111 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.2 | 42.0 | | ng/L | | 113 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J | 32.9 | 37.3 | | ng/L | | 110 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.63 | J | 34.9 | 38.6 | | ng/L | | 109 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | J | 33.9 | 37.5 | | ng/L | | 105 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-69 MS**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: PWS-MS02-042821**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.29 | J | 35.5 | 40.5 | | ng/L | | 113 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 0.85 | J I | 34.6 | 37.6 | | ng/L | | 106 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.8 | 38.3 | | ng/L | | 107 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | 0.34 | J | 35.9 | 39.8 | | ng/L | | 110 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.1 | 38.8 | | ng/L | | 108 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.2 | 44.2 | | ng/L | | 119 | 70 - 130 |
| NMeFOSA | 0.42 | J I | 37.2 | 40.2 | | ng/L | | 107 | 70 - 130 |
| NEtFOSA | ND | | 37.2 | 41.3 | | ng/L | | 111 | 70 - 130 |
| NMeFOSAA | ND | | 37.2 | 39.9 | | ng/L | | 107 | 70 - 130 |
| NEtFOSAA | ND | | 37.2 | 43.1 | | ng/L | | 116 | 70 - 130 |
| NMeFOSE | ND | | 37.2 | 40.1 | | ng/L | | 108 | 70 - 130 |
| NEtFOSE | ND | | 37.2 | 39.6 | | ng/L | | 106 | 70 - 130 |
| 4:2 FTS | 0.38 | J | 34.8 | 37.6 | | ng/L | | 107 | 70 - 130 |
| 6:2 FTS | ND | | 35.3 | 40.7 | | ng/L | | 115 | 70 - 130 |
| 8:2 FTS | ND | | 35.7 | 38.8 | | ng/L | | 109 | 70 - 130 |
| 10:2 FTS | ND | | 35.9 | 38.8 | | ng/L | | 108 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 37.2 | 41.6 | | ng/L | | 112 | 70 - 130 |
| F-53B Major | 0.37 | J | 34.7 | 39.8 | | ng/L | | 114 | 70 - 130 |
| F-53B Minor | ND | | 35.1 | 39.5 | | ng/L | | 113 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.1 | 41.1 | | ng/L | | 117 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* |
| *13C5 PFPeA* | *90* | | *25 - 150* |
| *13C2 PFHxA* | *94* | | *25 - 150* |
| *13C4 PFHpA* | *93* | | *25 - 150* |
| *13C4 PFOA* | *98* | | *25 - 150* |
| *13C5 PFNA* | *88* | | *25 - 150* |
| *13C2 PFDA* | *100* | | *25 - 150* |
| *13C2 PFUnA* | *100* | | *25 - 150* |
| *13C2 PFDoA* | *98* | | *25 - 150* |
| *13C2 PFTeDA* | *93* | | *25 - 150* |
| *13C2 PFHxDA* | *106* | | *25 - 150* |
| *13C3 PFBS* | *90* | | *25 - 150* |
| *18O2 PFHxS* | *92* | | *25 - 150* |
| *13C4 PFOS* | *85* | | *25 - 150* |
| *13C8 FOSA* | *85* | | *10 - 150* |
| *M2-4:2 FTS* | *79* | | *25 - 150* |
| *M2-6:2 FTS* | *76* | | *25 - 150* |
| *M2-8:2 FTS* | *69* | | *25 - 150* |
| *13C2 10:2 FTS* | *69* | | *25 - 150* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-69 MS**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: PWS-MS02-042821**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *62* | | *25 - 150* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* |
| *d-N-EtFOSA-M* | *77* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* |

**Lab Sample ID: 320-73077-69 MSD**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: PWS-MSD02-042821**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.4 | J | 37.2 | 43.1 | | ng/L | | 107 | 70 - 130 | 5 | 30 |
| Perfluoropentanoic acid (PFPeA) | ND | | 37.2 | 40.3 | | ng/L | | 108 | 70 - 130 | 9 | 30 |
| Perfluorohexanoic acid (PFHxA) | 0.71 | J | 37.2 | 41.1 | | ng/L | | 108 | 70 - 130 | 0 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 0.33 | J | 37.2 | 39.9 | | ng/L | | 106 | 70 - 130 | 9 | 30 |
| Perfluorooctanoic acid (PFOA) | ND | | 37.2 | 41.8 | | ng/L | | 112 | 70 - 130 | 3 | 30 |
| Perfluorononanoic acid (PFNA) | 0.35 | J | 37.2 | 44.5 | | ng/L | | 119 | 70 - 130 | 6 | 30 |
| Perfluorodecanoic acid (PFDA) | 0.59 | J | 37.2 | 42.8 | | ng/L | | 113 | 70 - 130 | 12 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.2 | 35.9 | | ng/L | | 96 | 70 - 130 | 9 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.2 | 44.5 | | ng/L | | 120 | 70 - 130 | 5 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.2 | 39.3 | | ng/L | | 106 | 70 - 130 | 6 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.2 | 40.4 | | ng/L | | 109 | 70 - 130 | 12 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.2 | 36.8 | | ng/L | | 99 | 70 - 130 | 12 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.2 | 37.7 | | ng/L | | 101 | 70 - 130 | 11 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J | 32.9 | 36.4 | | ng/L | | 107 | 70 - 130 | 2 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.63 | J | 34.9 | 38.1 | | ng/L | | 107 | 70 - 130 | 1 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | J | 33.9 | 36.4 | | ng/L | | 102 | 70 - 130 | 3 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.29 | J | 35.5 | 39.1 | | ng/L | | 109 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 0.85 | J I | 34.6 | 38.6 | | ng/L | | 109 | 70 - 130 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.8 | 34.8 | | ng/L | | 97 | 70 - 130 | 10 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | 0.34 | J | 35.9 | 36.6 | | ng/L | | 101 | 70 - 130 | 8 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.1 | 40.8 | | ng/L | | 113 | 70 - 130 | 5 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.2 | 43.3 | | ng/L | | 116 | 70 - 130 | 2 | 30 |
| NMeFOSA | 0.42 | J I | 37.2 | 41.8 | | ng/L | | 111 | 70 - 130 | 4 | 30 |
| NEtFOSA | ND | | 37.2 | 39.6 | | ng/L | | 106 | 70 - 130 | 4 | 30 |
| NMeFOSAA | ND | | 37.2 | 40.4 | | ng/L | | 108 | 70 - 130 | 1 | 30 |
| NEtFOSAA | ND | | 37.2 | 42.7 | | ng/L | | 115 | 70 - 130 | 1 | 30 |
| NMeFOSE | ND | | 37.2 | 43.2 | | ng/L | | 116 | 70 - 130 | 7 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-69 MSD**
**Matrix: Water**
**Analysis Batch: 486909**

**Client Sample ID: PWS-MSD02-042821**
**Prep Type: Total/NA**
**Prep Batch: 485969**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 37.2 | 38.0 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| 4:2 FTS | 0.38 | J | 34.8 | 33.9 | | ng/L | | 96 | 70 - 130 | 10 | 30 |
| 6:2 FTS | ND | | 35.3 | 39.7 | | ng/L | | 112 | 70 - 130 | 3 | 30 |
| 8:2 FTS | ND | | 35.7 | 37.3 | | ng/L | | 105 | 70 - 130 | 4 | 30 |
| 10:2 FTS | ND | | 35.9 | 34.2 | | ng/L | | 95 | 70 - 130 | 13 | 30 |
| HFPO-DA (GenX) | ND | | 37.2 | 42.8 | | ng/L | | 115 | 70 - 130 | 3 | 30 |
| F-53B Major | 0.37 | J | 34.7 | 39.9 | | ng/L | | 114 | 70 - 130 | 0 | 30 |
| F-53B Minor | ND | | 35.1 | 37.0 | | ng/L | | 106 | 70 - 130 | 7 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.1 | 41.2 | | ng/L | | 117 | 70 - 130 | 0 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* |
| *13C5 PFPeA* | *92* | | *25 - 150* |
| *13C2 PFHxA* | *94* | | *25 - 150* |
| *13C4 PFHpA* | *106* | | *25 - 150* |
| *13C4 PFOA* | *94* | | *25 - 150* |
| *13C5 PFNA* | *86* | | *25 - 150* |
| *13C2 PFDA* | *89* | | *25 - 150* |
| *13C2 PFUnA* | *106* | | *25 - 150* |
| *13C2 PFDoA* | *96* | | *25 - 150* |
| *13C2 PFTeDA* | *96* | | *25 - 150* |
| *13C2 PFHxDA* | *105* | | *25 - 150* |
| *13C3 PFBS* | *90* | | *25 - 150* |
| *18O2 PFHxS* | *92* | | *25 - 150* |
| *13C4 PFOS* | *87* | | *25 - 150* |
| *13C8 FOSA* | *89* | | *10 - 150* |
| *M2-4:2 FTS* | *92* | | *25 - 150* |
| *M2-6:2 FTS* | *78* | | *25 - 150* |
| *M2-8:2 FTS* | *76* | | *25 - 150* |
| *13C2 10:2 FTS* | *74* | | *25 - 150* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* |
| *d5-NEtFOSAA* | *72* | | *25 - 150* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* |

**Lab Sample ID: MB 320-487624/1-A**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-487624/1-A**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/10/21 11:44 | 05/11/21 13:10 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *104* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C5 PFPeA* | *109* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFHxA* | *108* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C4 PFHpA* | *111* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C4 PFOA* | *110* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C5 PFNA* | *115* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFDA* | *113* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFUnA* | *125* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFDoA* | *102* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |
| *13C2 PFHxDA* | *105* | | *25 - 150* | *05/10/21 11:44* | *05/11/21 13:10* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-487624/1-A**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C3 PFBS | 105 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 18O2 PFHxS | 109 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 13C4 PFOS | 110 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 13C8 FOSA | 116 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| M2-4:2 FTS | 135 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| M2-6:2 FTS | 133 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| M2-8:2 FTS | 128 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 13C2 10:2 FTS | 122 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| 13C3 HFPO-DA | 100 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d3-NMeFOSAA | 119 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d5-NEtFOSAA | 120 | | 25 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d-N-MeFOSA-M | 88 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d-N-EtFOSA-M | 87 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d7-N-MeFOSE-M | 116 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |
| d9-N-EtFOSE-M | 107 | | 10 - 150 | 05/10/21 11:44 | 05/11/21 13:10 | 1 |

**Lab Sample ID: LCS 320-487624/2-A**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 47.6 | | ng/L | | 119 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 39.8 | | ng/L | | 99 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 37.2 | | ng/L | | 93 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 36.0 | | ng/L | | 90 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 39.8 | | ng/L | | 99 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 43.9 | | ng/L | | 110 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 44.7 | | ng/L | | 112 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 34.1 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 40.6 | | ng/L | | 108 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.0 | | ng/L | | 93 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 41.7 | | ng/L | | 109 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.2 | | ng/L | | 103 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.2 | | ng/L | | 102 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487624/2-A**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 37.0 | | ng/L | | 96 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.3 | | ng/L | | 104 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| NMeFOSA | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 |
| NEtFOSA | 40.0 | 44.0 | | ng/L | | 110 | 60 - 135 |
| NMeFOSAA | 40.0 | 45.5 | | ng/L | | 114 | 60 - 135 |
| NEtFOSAA | 40.0 | 39.0 | | ng/L | | 98 | 60 - 135 |
| NMeFOSE | 40.0 | 38.0 | | ng/L | | 95 | 60 - 135 |
| NEtFOSE | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| 4:2 FTS | 37.4 | 36.0 | | ng/L | | 96 | 60 - 135 |
| 6:2 FTS | 37.9 | 41.3 | | ng/L | | 109 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.6 | | ng/L | | 106 | 60 - 135 |
| 10:2 FTS | 38.6 | 39.3 | | ng/L | | 102 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 44.2 | | ng/L | | 111 | 60 - 135 |
| F-53B Major | 37.3 | 36.8 | | ng/L | | 99 | 60 - 135 |
| F-53B Minor | 37.7 | 35.2 | | ng/L | | 93 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 35.9 | | ng/L | | 95 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* |
| *13C5 PFPeA* | *77* | | *25 - 150* |
| *13C2 PFHxA* | *74* | | *25 - 150* |
| *13C4 PFHpA* | *74* | | *25 - 150* |
| *13C4 PFOA* | *75* | | *25 - 150* |
| *13C5 PFNA* | *80* | | *25 - 150* |
| *13C2 PFDA* | *77* | | *25 - 150* |
| *13C2 PFUnA* | *80* | | *25 - 150* |
| *13C2 PFDoA* | *76* | | *25 - 150* |
| *13C2 PFTeDA* | *68* | | *25 - 150* |
| *13C2 PFHxDA* | *78* | | *25 - 150* |
| *13C3 PFBS* | *80* | | *25 - 150* |
| *18O2 PFHxS* | *80* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *77* | | *10 - 150* |
| *M2-4:2 FTS* | *93* | | *25 - 150* |
| *M2-6:2 FTS* | *91* | | *25 - 150* |
| *M2-8:2 FTS* | *89* | | *25 - 150* |
| *13C2 10:2 FTS* | *80* | | *25 - 150* |
| *13C3 HFPO-DA* | *73* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |
| *d5-NEtFOSAA* | *77* | | *25 - 150* |
| *d-N-MeFOSA-M* | *61* | | *10 - 150* |
| *d-N-EtFOSA-M* | *58* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *68* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-21 MS**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: PWS-MS01-042721**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 36 | | 33.4 | 70.0 | | ng/L | | 102 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 0.90 | J | 33.4 | 34.3 | | ng/L | | 100 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 1.3 | J | 33.4 | 37.0 | | ng/L | | 107 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 0.41 | J | 33.4 | 37.5 | | ng/L | | 111 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 13 | | 33.4 | 50.7 | | ng/L | | 114 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | 0.26 | J | 33.4 | 34.4 | | ng/L | | 102 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | 0.29 | J | 33.4 | 29.5 | | ng/L | | 88 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.4 | 28.6 | | ng/L | | 86 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.4 | 36.7 | | ng/L | | 110 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.4 | 35.6 | | ng/L | | 107 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.4 | 35.3 | | ng/L | | 106 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.4 | 35.5 | | ng/L | | 106 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.4 | 39.8 | | ng/L | | 119 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 29.5 | 42.5 | | ng/L | | 106 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | 0.81 | J | 31.3 | 36.9 | | ng/L | | 115 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 3.5 | | 30.4 | 32.3 | | ng/L | | 95 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 31.8 | 34.8 | | ng/L | | 109 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 16 | | 31.0 | 48.0 | | ng/L | | 104 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 32.1 | 31.5 | | ng/L | | 98 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.2 | 32.1 | | ng/L | | 100 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.3 | 33.2 | | ng/L | | 103 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 33.4 | 37.1 | | ng/L | | 105 | 70 - 130 |
| NMeFOSA | ND | | 33.4 | 36.6 | | ng/L | | 110 | 70 - 130 |
| NEtFOSA | ND | | 33.4 | 35.1 | | ng/L | | 105 | 70 - 130 |
| NMeFOSAA | ND | | 33.4 | 36.4 | | ng/L | | 109 | 70 - 130 |
| NEtFOSAA | ND | | 33.4 | 33.6 | | ng/L | | 101 | 70 - 130 |
| NMeFOSE | ND | | 33.4 | 35.3 | | ng/L | | 106 | 70 - 130 |
| NEtFOSE | ND | | 33.4 | 34.3 | | ng/L | | 103 | 70 - 130 |
| 4:2 FTS | ND | | 31.2 | 27.9 | | ng/L | | 90 | 70 - 130 |
| 6:2 FTS | ND | | 31.7 | 31.5 | | ng/L | | 100 | 70 - 130 |
| 8:2 FTS | ND | | 32.0 | 31.4 | | ng/L | | 98 | 70 - 130 |
| 10:2 FTS | ND | | 32.2 | 29.7 | | ng/L | | 92 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 33.4 | 37.5 | | ng/L | | 112 | 70 - 130 |
| F-53B Major | ND | | 31.1 | 33.0 | | ng/L | | 106 | 70 - 130 |
| F-53B Minor | ND | | 31.5 | 29.6 | | ng/L | | 94 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.5 | 33.1 | | ng/L | | 105 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 69 | | 25 - 150 |
| 13C5 PFPeA | 74 | | 25 - 150 |
| 13C2 PFHxA | 72 | | 25 - 150 |
| 13C4 PFHpA | 74 | | 25 - 150 |
| 13C4 PFOA | 72 | | 25 - 150 |
| 13C5 PFNA | 79 | | 25 - 150 |
| 13C2 PFDA | 74 | | 25 - 150 |
| 13C2 PFUnA | 79 | | 25 - 150 |
| 13C2 PFDoA | 71 | | 25 - 150 |
| 13C2 PFTeDA | 66 | | 25 - 150 |
| 13C2 PFHxDA | 72 | | 25 - 150 |
| 13C3 PFBS | 72 | | 25 - 150 |
| 18O2 PFHxS | 78 | | 25 - 150 |
| 13C4 PFOS | 74 | | 25 - 150 |
| 13C8 FOSA | 78 | | 10 - 150 |
| M2-4:2 FTS | 102 | | 25 - 150 |
| M2-6:2 FTS | 81 | | 25 - 150 |
| M2-8:2 FTS | 81 | | 25 - 150 |
| 13C2 10:2 FTS | 84 | | 25 - 150 |
| 13C3 HFPO-DA | 70 | | 25 - 150 |
| d3-NMeFOSAA | 77 | | 25 - 150 |
| d5-NEtFOSAA | 73 | | 25 - 150 |
| d-N-MeFOSA-M | 61 | | 10 - 150 |
| d-N-EtFOSA-M | 57 | | 10 - 150 |
| d7-N-MeFOSE-M | 74 | | 10 - 150 |
| d9-N-EtFOSE-M | 70 | | 10 - 150 |

**Lab Sample ID: 320-73077-21 MSD** — **Client Sample ID: PWS-MSD01-042721**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 487979** — **Prep Batch: 487624**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 36 | | 33.8 | 71.0 | | ng/L | | 103 | 70 - 130 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | 0.90 | J | 33.8 | 36.0 | | ng/L | | 104 | 70 - 130 | 5 | 30 |
| Perfluorohexanoic acid (PFHxA) | 1.3 | J | 33.8 | 37.1 | | ng/L | | 106 | 70 - 130 | 0 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 0.41 | J | 33.8 | 39.6 | | ng/L | | 116 | 70 - 130 | 5 | 30 |
| Perfluorooctanoic acid (PFOA) | 13 | | 33.8 | 46.4 | | ng/L | | 100 | 70 - 130 | 9 | 30 |
| Perfluorononanoic acid (PFNA) | 0.26 | J | 33.8 | 34.9 | | ng/L | | 103 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | 0.29 | J | 33.8 | 33.1 | | ng/L | | 97 | 70 - 130 | 11 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.8 | 29.6 | | ng/L | | 87 | 70 - 130 | 3 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.8 | 39.0 | | ng/L | | 115 | 70 - 130 | 6 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.8 | 36.8 | | ng/L | | 109 | 70 - 130 | 3 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.8 | 35.7 | | ng/L | | 106 | 70 - 130 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.8 | 39.9 | | ng/L | | 118 | 70 - 130 | 12 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.8 | 41.9 | | ng/L | | 124 | 70 - 130 | 5 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 29.9 | 42.6 | | ng/L | | 105 | 70 - 130 | 0 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-21 MSD**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: PWS-MSD01-042721**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 0.81 | J | 31.7 | 36.9 | | ng/L | | 114 | 70 - 130 | 0 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 3.5 | | 30.8 | 34.4 | | ng/L | | 100 | 70 - 130 | 6 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 32.2 | 33.4 | | ng/L | | 103 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 16 | | 31.4 | 46.7 | | ng/L | | 99 | 70 - 130 | 3 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 32.4 | 31.2 | | ng/L | | 96 | 70 - 130 | 1 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.6 | 30.1 | | ng/L | | 92 | 70 - 130 | 6 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.7 | 32.9 | | ng/L | | 101 | 70 - 130 | 1 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 33.8 | 41.5 | | ng/L | | 117 | 70 - 130 | 11 | 30 |
| NMeFOSA | ND | | 33.8 | 35.1 | | ng/L | | 104 | 70 - 130 | 4 | 30 |
| NEtFOSA | ND | | 33.8 | 33.5 | | ng/L | | 99 | 70 - 130 | 5 | 30 |
| NMeFOSAA | ND | | 33.8 | 37.0 | | ng/L | | 109 | 70 - 130 | 2 | 30 |
| NEtFOSAA | ND | | 33.8 | 31.5 | | ng/L | | 93 | 70 - 130 | 6 | 30 |
| NMeFOSE | ND | | 33.8 | 32.9 | | ng/L | | 97 | 70 - 130 | 7 | 30 |
| NEtFOSE | ND | | 33.8 | 32.2 | | ng/L | | 95 | 70 - 130 | 6 | 30 |
| 4:2 FTS | ND | | 31.6 | 31.7 | | ng/L | | 100 | 70 - 130 | 13 | 30 |
| 6:2 FTS | ND | | 32.0 | 33.4 | | ng/L | | 104 | 70 - 130 | 6 | 30 |
| 8:2 FTS | ND | | 32.4 | 32.0 | | ng/L | | 99 | 70 - 130 | 2 | 30 |
| 10:2 FTS | ND | | 32.6 | 30.0 | | ng/L | | 92 | 70 - 130 | 1 | 30 |
| HFPO-DA (GenX) | ND | | 33.8 | 36.3 | | ng/L | | 107 | 70 - 130 | 3 | 30 |
| F-53B Major | ND | | 31.5 | 30.7 | | ng/L | | 98 | 70 - 130 | 7 | 30 |
| F-53B Minor | ND | | 31.8 | 27.4 | | ng/L | | 86 | 70 - 130 | 8 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.8 | 30.9 | | ng/L | | 97 | 70 - 130 | 7 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* |
| *13C5 PFPeA* | *82* | | *25 - 150* |
| *13C2 PFHxA* | *81* | | *25 - 150* |
| *13C4 PFHpA* | *80* | | *25 - 150* |
| *13C4 PFOA* | *84* | | *25 - 150* |
| *13C5 PFNA* | *87* | | *25 - 150* |
| *13C2 PFDA* | *81* | | *25 - 150* |
| *13C2 PFUnA* | *92* | | *25 - 150* |
| *13C2 PFDoA* | *75* | | *25 - 150* |
| *13C2 PFTeDA* | *71* | | *25 - 150* |
| *13C2 PFHxDA* | *79* | | *25 - 150* |
| *13C3 PFBS* | *79* | | *25 - 150* |
| *18O2 PFHxS* | *87* | | *25 - 150* |
| *13C4 PFOS* | *87* | | *25 - 150* |
| *13C8 FOSA* | *86* | | *10 - 150* |
| *M2-4:2 FTS* | *104* | | *25 - 150* |
| *M2-6:2 FTS* | *102* | | *25 - 150* |
| *M2-8:2 FTS* | *91* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73077-21 MSD**
**Matrix: Water**
**Analysis Batch: 487979**

**Client Sample ID: PWS-MSD01-042721**
**Prep Type: Total/NA**
**Prep Batch: 487624**

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C2 10:2 FTS* | *89* | | *25 - 150* |
| *13C3 HFPO-DA* | *79* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* |
| *d-N-MeFOSA-M* | *70* | | *10 - 150* |
| *d-N-EtFOSA-M* | *63* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *79* | | *10 - 150* |

**Lab Sample ID: MB 320-487960/1-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-487960/1-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/11/21 12:00 | 05/12/21 07:57 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C5 PFPeA* | *62* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFHxA* | *75* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C4 PFHpA* | *67* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C4 PFOA* | *72* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C5 PFNA* | *70* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFDA* | *68* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFUnA* | *77* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFDoA* | *68* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFTeDA* | *62* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 PFHxDA* | *58* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C3 PFBS* | *57* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *18O2 PFHxS* | *65* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C4 PFOS* | *66* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C8 FOSA* | *66* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *M2-4:2 FTS* | *56* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *M2-6:2 FTS* | *73* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *M2-8:2 FTS* | *81* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C2 10:2 FTS* | *66* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *13C3 HFPO-DA* | *62* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d5-NEtFOSAA* | *74* | | *25 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d-N-MeFOSA-M* | *50* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d-N-EtFOSA-M* | *47* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d7-N-MeFOSE-M* | *68* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |
| *d9-N-EtFOSE-M* | *61* | | *10 - 150* | *05/11/21 12:00* | *05/12/21 07:57* | *1* |

**Lab Sample ID: LCS 320-487960/2-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 44.6 | | ng/L | | 112 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 37.4 | | ng/L | | 93 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487960/2-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorododecanoic acid (PFDoA) | 40.0 | 44.7 | | ng/L | | 112 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 47.6 | | ng/L | | 119 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 44.8 | | ng/L | | 112 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 45.0 | | ng/L | | 113 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.9 | | ng/L | | 107 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 43.9 | | ng/L | | 117 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 40.7 | | ng/L | | 112 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 39.7 | | ng/L | | 104 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 37.5 | | ng/L | | 101 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.6 | | ng/L | | 98 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 39.5 | | ng/L | | 102 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 37.3 | | ng/L | | 96 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| NMeFOSA | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 |
| NEtFOSA | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 |
| NMeFOSAA | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| NEtFOSAA | 40.0 | 45.4 | | ng/L | | 113 | 60 - 135 |
| NMeFOSE | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 |
| NEtFOSE | 40.0 | 39.8 | | ng/L | | 100 | 60 - 135 |
| 4:2 FTS | 37.4 | 45.0 | | ng/L | | 120 | 60 - 135 |
| 6:2 FTS | 37.9 | 42.7 | | ng/L | | 113 | 60 - 135 |
| 8:2 FTS | 38.3 | 39.1 | | ng/L | | 102 | 60 - 135 |
| 10:2 FTS | 38.6 | 38.4 | | ng/L | | 99 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| F-53B Major | 37.3 | 42.2 | | ng/L | | 113 | 60 - 135 |
| F-53B Minor | 37.7 | 40.9 | | ng/L | | 109 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 40.2 | | ng/L | | 107 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* |
| *13C5 PFPeA* | *81* | | *25 - 150* |
| *13C2 PFHxA* | *94* | | *25 - 150* |
| *13C4 PFHpA* | *88* | | *25 - 150* |
| *13C4 PFOA* | *86* | | *25 - 150* |
| *13C5 PFNA* | *95* | | *25 - 150* |
| *13C2 PFDA* | *92* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487960/2-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C2 PFUnA | 98 | | 25 - 150 |
| 13C2 PFDoA | 87 | | 25 - 150 |
| 13C2 PFTeDA | 79 | | 25 - 150 |
| 13C2 PFHxDA | 77 | | 25 - 150 |
| 13C3 PFBS | 79 | | 25 - 150 |
| 18O2 PFHxS | 80 | | 25 - 150 |
| 13C4 PFOS | 86 | | 25 - 150 |
| 13C8 FOSA | 86 | | 10 - 150 |
| M2-4:2 FTS | 64 | | 25 - 150 |
| M2-6:2 FTS | 86 | | 25 - 150 |
| M2-8:2 FTS | 108 | | 25 - 150 |
| 13C2 10:2 FTS | 91 | | 25 - 150 |
| 13C3 HFPO-DA | 87 | | 25 - 150 |
| d3-NMeFOSAA | 99 | | 25 - 150 |
| d5-NEtFOSAA | 99 | | 25 - 150 |
| d-N-MeFOSA-M | 67 | | 10 - 150 |
| d-N-EtFOSA-M | 68 | | 10 - 150 |
| d7-N-MeFOSE-M | 84 | | 10 - 150 |
| d9-N-EtFOSE-M | 86 | | 10 - 150 |

**Lab Sample ID: LCSD 320-487960/3-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 | 4 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 | 12 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 1 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 6 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 | 4 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 44.0 | | ng/L | | 110 | 60 - 135 | 8 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 | 4 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 | 10 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 6 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 40.5 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 50.0 | | ng/L | | 125 | 60 - 135 | 5 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 45.6 | | ng/L | | 114 | 60 - 135 | 2 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 | 5 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 38.9 | | ng/L | | 110 | 60 - 135 | 3 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 45.0 | | ng/L | | 120 | 60 - 135 | 3 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 36.0 | | ng/L | | 99 | 60 - 135 | 12 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-487960/3-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 41.2 | | ng/L | | 108 | 60 - 135 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.1 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 38.1 | | ng/L | | 99 | 60 - 135 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 36.6 | | ng/L | | 95 | 60 - 135 | 7 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 35.6 | | ng/L | | 92 | 60 - 135 | 5 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 | 3 | 30 |
| NMeFOSA | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 | 5 | 30 |
| NEtFOSA | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 | 1 | 30 |
| NMeFOSAA | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 | 1 | 30 |
| NEtFOSAA | 40.0 | 44.6 | | ng/L | | 111 | 60 - 135 | 2 | 30 |
| NMeFOSE | 40.0 | 44.6 | | ng/L | | 112 | 60 - 135 | 3 | 30 |
| NEtFOSE | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 | 9 | 30 |
| 4:2 FTS | 37.4 | 40.6 | | ng/L | | 109 | 60 - 135 | 10 | 30 |
| 6:2 FTS | 37.9 | 46.3 | | ng/L | | 122 | 60 - 135 | 8 | 30 |
| 8:2 FTS | 38.3 | 42.9 | | ng/L | | 112 | 60 - 135 | 9 | 30 |
| 10:2 FTS | 38.6 | 42.7 | | ng/L | | 111 | 60 - 135 | 11 | 30 |
| HFPO-DA (GenX) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 | 10 | 30 |
| F-53B Major | 37.3 | 43.3 | | ng/L | | 116 | 60 - 135 | 3 | 30 |
| F-53B Minor | 37.7 | 38.7 | | ng/L | | 103 | 60 - 135 | 6 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 42.0 | | ng/L | | 112 | 60 - 135 | 4 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *68* | | *25 - 150* |
| *13C5 PFPeA* | *66* | | *25 - 150* |
| *13C2 PFHxA* | *76* | | *25 - 150* |
| *13C4 PFHpA* | *75* | | *25 - 150* |
| *13C4 PFOA* | *73* | | *25 - 150* |
| *13C5 PFNA* | *68* | | *25 - 150* |
| *13C2 PFDA* | *70* | | *25 - 150* |
| *13C2 PFUnA* | *73* | | *25 - 150* |
| *13C2 PFDoA* | *67* | | *25 - 150* |
| *13C2 PFTeDA* | *60* | | *25 - 150* |
| *13C2 PFHxDA* | *60* | | *25 - 150* |
| *13C3 PFBS* | *60* | | *25 - 150* |
| *18O2 PFHxS* | *68* | | *25 - 150* |
| *13C4 PFOS* | *65* | | *25 - 150* |
| *13C8 FOSA* | *65* | | *10 - 150* |
| *M2-4:2 FTS* | *57* | | *25 - 150* |
| *M2-6:2 FTS* | *66* | | *25 - 150* |
| *M2-8:2 FTS* | *76* | | *25 - 150* |
| *13C2 10:2 FTS* | *63* | | *25 - 150* |
| *13C3 HFPO-DA* | *65* | | *25 - 150* |
| *d3-NMeFOSAA* | *76* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-487960/3-A**
**Matrix: Water**
**Analysis Batch: 488189**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 487960**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| d5-NEtFOSAA | 71 | | 25 - 150 |
| d-N-MeFOSA-M | 52 | | 10 - 150 |
| d-N-EtFOSA-M | 53 | | 10 - 150 |
| d7-N-MeFOSE-M | 66 | | 10 - 150 |
| d9-N-EtFOSE-M | 64 | | 10 - 150 |

## LCMS

### Prep Batch: 485558

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-1 | PWS1132-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-3 | PWS1105-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-5 | PWS-FD02-042621 | Total/NA | Water | 3535 | |
| 320-73077-6 | PWS1182-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-8 | PWS1200-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-10 | PWS1104-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-12 | PWS1167-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-14 | PWS1097-OS-042621-100 | Total/NA | Water | 3535 | |
| 320-73077-16 | PWS1005-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-18 | PWS-FD01-042721 | Total/NA | Water | 3535 | |
| 320-73077-19 | PWS1080-IS-042721-100 | Total/NA | Water | 3535 | |
| MB 320-485558/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485558/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73077-1 MS | PWS-MS02-042621 | Total/NA | Water | 3535 | |
| 320-73077-1 MSD | PWS-MSD02-042621 | Total/NA | Water | 3535 | |

### Prep Batch: 485967

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-40 | PWS1096-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-42 | PWS1090-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-44 | PWS1098-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-46 | PWS1093-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-48 | PWS1094-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-52 | PWS1129-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-54 | PWS-FD01-042821 | Total/NA | Water | 3535 | |
| 320-73077-55 | PWS1115-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-57 | PWS1001-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-59 | PWS1082-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-61 | PWS1141-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-63 | PWS1050-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-65 | PWS1095-IS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-67 | PWS1111-OS-042821-100 | Total/NA | Water | 3535 | |
| MB 320-485967/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-485967/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-485967/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Prep Batch: 485969

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-69 | PWS1085-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-71 | PWS1118-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-73 | PWS-FD02-042821 | Total/NA | Water | 3535 | |
| 320-73077-74 | PWS1084-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-76 | PWS1164-IS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-78 | PWS1199-IS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-80 | PWS1150-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-82 | PWS1158-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-84 | PWS1177-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-86 | PWS1178-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-88 | PWS1102-OS-042821-100 | Total/NA | Water | 3535 | |
| 320-73077-90 | PWS1186-IS-042821-100 | Total/NA | Water | 3535 | |
| MB 320-485969/1-A | Method Blank | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 485969 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 320-485969/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73077-69 MS | PWS-MS02-042821 | Total/NA | Water | 3535 | |
| 320-73077-69 MSD | PWS-MSD02-042821 | Total/NA | Water | 3535 | |

### Analysis Batch: 486313

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-1 | PWS1132-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-3 | PWS1105-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-5 | PWS-FD02-042621 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-6 | PWS1182-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-8 | PWS1200-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-10 | PWS1104-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-12 | PWS1167-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-14 | PWS1097-OS-042621-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-16 | PWS1005-OS-042721-100 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-18 | PWS-FD01-042721 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-19 | PWS1080-IS-042721-100 | Total/NA | Water | 537 (modified) | 485558 |
| MB 320-485558/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485558 |
| LCS 320-485558/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-1 MS | PWS-MS02-042621 | Total/NA | Water | 537 (modified) | 485558 |
| 320-73077-1 MSD | PWS-MSD02-042621 | Total/NA | Water | 537 (modified) | 485558 |

### Analysis Batch: 486909

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-69 | PWS1085-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-71 | PWS1118-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-73 | PWS-FD02-042821 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-74 | PWS1084-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-76 | PWS1164-IS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-78 | PWS1199-IS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-80 | PWS1150-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-82 | PWS1158-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-84 | PWS1177-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-86 | PWS1178-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-88 | PWS1102-OS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-90 | PWS1186-IS-042821-100 | Total/NA | Water | 537 (modified) | 485969 |
| MB 320-485969/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485969 |
| LCS 320-485969/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-69 MS | PWS-MS02-042821 | Total/NA | Water | 537 (modified) | 485969 |
| 320-73077-69 MSD | PWS-MSD02-042821 | Total/NA | Water | 537 (modified) | 485969 |

### Prep Batch: 487624

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-21 | PWS1052-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-23 | PWS1042-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-25 | PWS1071-IS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-27 | PWS1010-IS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-29 | PWS1066-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-31 | PWS1091-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-33 | PWS-FD02-042721 | Total/NA | Water | 3535 | |
| 320-73077-34 | PWS1187-OS-042721-100 | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 487624 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-36 | PWS1086-OS-042721-100 | Total/NA | Water | 3535 | |
| 320-73077-38 | PWS1099-OS-042721-100 | Total/NA | Water | 3535 | |
| MB 320-487624/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-487624/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73077-21 MS | PWS-MS01-042721 | Total/NA | Water | 3535 | |
| 320-73077-21 MSD | PWS-MSD01-042721 | Total/NA | Water | 3535 | |

### Analysis Batch: 487756

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-40 | PWS1096-OS-042721-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-42 | PWS1090-OS-042721-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-44 | PWS1098-OS-042721-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-46 | PWS1093-OS-042721-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-48 | PWS1094-OS-042721-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-52 | PWS1129-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-54 | PWS-FD01-042821 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-55 | PWS1115-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-57 | PWS1001-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-59 | PWS1082-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-61 | PWS1141-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-63 | PWS1050-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-65 | PWS1095-IS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| 320-73077-67 | PWS1111-OS-042821-100 | Total/NA | Water | 537 (modified) | 485967 |
| MB 320-485967/1-A | Method Blank | Total/NA | Water | 537 (modified) | 485967 |
| LCS 320-485967/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 485967 |
| LCSD 320-485967/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 485967 |

### Prep Batch: 487960

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-50 | PWS1121-OS-042721-100 | Total/NA | Water | 3535 | |
| MB 320-487960/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-487960/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-487960/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 487979

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-21 | PWS1052-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-23 | PWS1042-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-25 | PWS1071-IS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-27 | PWS1010-IS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-29 | PWS1066-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-31 | PWS1091-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-33 | PWS-FD02-042721 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-36 | PWS1086-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-38 | PWS1099-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| MB 320-487624/1-A | Method Blank | Total/NA | Water | 537 (modified) | 487624 |
| LCS 320-487624/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-21 MS | PWS-MS01-042721 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-21 MSD | PWS-MSD01-042721 | Total/NA | Water | 537 (modified) | 487624 |

# QC Association Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## LCMS

### Analysis Batch: 488189

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-34 | PWS1187-OS-042721-100 | Total/NA | Water | 537 (modified) | 487624 |
| 320-73077-50 | PWS1121-OS-042721-100 | Total/NA | Water | 537 (modified) | 487960 |
| MB 320-487960/1-A | Method Blank | Total/NA | Water | 537 (modified) | 487960 |
| LCS 320-487960/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 487960 |
| LCSD 320-487960/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 487960 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1132-OS-042621-100
**Lab Sample ID: 320-73077-1**
**Date Collected: 04/26/21 09:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.7 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 01:18 | K1S | TAL SAC |

## Client Sample ID: PWS1105-OS-042621-100
**Lab Sample ID: 320-73077-3**
**Date Collected: 04/26/21 10:40**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.9 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 01:46 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-042621
**Lab Sample ID: 320-73077-5**
**Date Collected: 04/26/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 01:55 | K1S | TAL SAC |

## Client Sample ID: PWS1182-OS-042621-100
**Lab Sample ID: 320-73077-6**
**Date Collected: 04/26/21 12:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.3 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 02:04 | K1S | TAL SAC |

## Client Sample ID: PWS1200-OS-042621-100
**Lab Sample ID: 320-73077-8**
**Date Collected: 04/26/21 13:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.4 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 02:13 | K1S | TAL SAC |

## Client Sample ID: PWS1104-OS-042621-100
**Lab Sample ID: 320-73077-10**
**Date Collected: 04/26/21 14:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.6 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 02:22 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1167-OS-042621-100
**Lab Sample ID: 320-73077-12**
**Date Collected: 04/26/21 15:55**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.4 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 02:59 | K1S | TAL SAC |

## Client Sample ID: PWS1097-OS-042621-100
**Lab Sample ID: 320-73077-14**
**Date Collected: 04/26/21 17:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.1 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 03:08 | K1S | TAL SAC |

## Client Sample ID: PWS1005-OS-042721-100
**Lab Sample ID: 320-73077-16**
**Date Collected: 04/27/21 08:33**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 03:17 | K1S | TAL SAC |

## Client Sample ID: PWS-FD01-042721
**Lab Sample ID: 320-73077-18**
**Date Collected: 04/27/21 12:01**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 03:26 | K1S | TAL SAC |

## Client Sample ID: PWS1080-IS-042721-100
**Lab Sample ID: 320-73077-19**
**Date Collected: 04/27/21 09:31**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.7 mL | 10.00 mL | 485558 | 05/04/21 04:30 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486313 | 05/06/21 03:36 | K1S | TAL SAC |

## Client Sample ID: PWS1052-OS-042721-100
**Lab Sample ID: 320-73077-21**
**Date Collected: 04/27/21 15:21**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.6 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 13:28 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1042-OS-042721-100
**Lab Sample ID: 320-73077-23**
**Date Collected: 04/27/21 16:28**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 293.7 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 13:56 | RS1 | TAL SAC |

## Client Sample ID: PWS1071-IS-042721-100
**Lab Sample ID: 320-73077-25**
**Date Collected: 04/27/21 17:13**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 307.1 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 14:05 | RS1 | TAL SAC |

## Client Sample ID: PWS1010-IS-042721-100
**Lab Sample ID: 320-73077-27**
**Date Collected: 04/27/21 18:26**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 307 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 14:14 | RS1 | TAL SAC |

## Client Sample ID: PWS1066-OS-042721-100
**Lab Sample ID: 320-73077-29**
**Date Collected: 04/27/21 19:07**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.3 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 14:23 | RS1 | TAL SAC |

## Client Sample ID: PWS1091-OS-042721-100
**Lab Sample ID: 320-73077-31**
**Date Collected: 04/27/21 09:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 289.3 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 14:32 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD02-042721
**Lab Sample ID: 320-73077-33**
**Date Collected: 04/27/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 279.8 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 15:00 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1187-OS-042721-100
**Lab Sample ID: 320-73077-34**
**Date Collected: 04/27/21 10:20**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 291.1 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488189 | 05/12/21 08:35 | JY1 | TAL SAC |

## Client Sample ID: PWS1086-OS-042721-100
**Lab Sample ID: 320-73077-36**
**Date Collected: 04/27/21 11:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.8 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 15:18 | RS1 | TAL SAC |

## Client Sample ID: PWS1099-OS-042721-100
**Lab Sample ID: 320-73077-38**
**Date Collected: 04/27/21 11:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.7 mL | 10.0 mL | 487624 | 05/10/21 11:44 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487979 | 05/11/21 15:27 | RS1 | TAL SAC |

## Client Sample ID: PWS1096-OS-042721-100
**Lab Sample ID: 320-73077-40**
**Date Collected: 04/27/21 12:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 20:41 | RS1 | TAL SAC |

## Client Sample ID: PWS1090-OS-042721-100
**Lab Sample ID: 320-73077-42**
**Date Collected: 04/27/21 13:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.5 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 20:50 | RS1 | TAL SAC |

## Client Sample ID: PWS1098-OS-042721-100
**Lab Sample ID: 320-73077-44**
**Date Collected: 04/27/21 14:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 249.8 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 20:59 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1093-OS-042721-100
**Lab Sample ID: 320-73077-46**
**Date Collected: 04/27/21 15:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.4 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 21:09 | RS1 | TAL SAC |

## Client Sample ID: PWS1094-OS-042721-100
**Lab Sample ID: 320-73077-48**
**Date Collected: 04/27/21 17:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.8 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 21:18 | RS1 | TAL SAC |

## Client Sample ID: PWS1121-OS-042721-100
**Lab Sample ID: 320-73077-50**
**Date Collected: 04/27/21 18:00**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 285.7 mL | 10.0 mL | 487960 | 05/11/21 12:00 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488189 | 05/12/21 08:26 | JY1 | TAL SAC |

## Client Sample ID: PWS1129-OS-042821-100
**Lab Sample ID: 320-73077-52**
**Date Collected: 04/28/21 08:32**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.8 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 21:37 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD01-042821
**Lab Sample ID: 320-73077-54**
**Date Collected: 04/28/21 12:01**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.2 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 22:15 | RS1 | TAL SAC |

## Client Sample ID: PWS1115-OS-042821-100
**Lab Sample ID: 320-73077-55**
**Date Collected: 04/28/21 09:28**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.8 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 22:24 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1001-OS-042821-100
**Lab Sample ID: 320-73077-57**
**Date Collected: 04/28/21 10:11**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 261.4 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 22:33 | RS1 | TAL SAC |

## Client Sample ID: PWS1082-OS-042821-100
**Lab Sample ID: 320-73077-59**
**Date Collected: 04/28/21 12:27**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.7 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 22:43 | RS1 | TAL SAC |

## Client Sample ID: PWS1141-OS-042821-100
**Lab Sample ID: 320-73077-61**
**Date Collected: 04/28/21 14:23**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.4 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 22:52 | RS1 | TAL SAC |

## Client Sample ID: PWS1050-OS-042821-100
**Lab Sample ID: 320-73077-63**
**Date Collected: 04/28/21 15:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.9 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 23:02 | RS1 | TAL SAC |

## Client Sample ID: PWS1095-IS-042821-100
**Lab Sample ID: 320-73077-65**
**Date Collected: 04/28/21 16:03**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.4 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 23:11 | RS1 | TAL SAC |

## Client Sample ID: PWS1111-OS-042821-100
**Lab Sample ID: 320-73077-67**
**Date Collected: 04/28/21 17:04**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272 mL | 10.0 mL | 485967 | 05/05/21 04:16 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487756 | 05/10/21 23:20 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1085-OS-042821-100
**Lab Sample ID: 320-73077-69**
**Date Collected: 04/28/21 08:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.6 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 16:51 | SK | TAL SAC |

## Client Sample ID: PWS1118-OS-042821-100
**Lab Sample ID: 320-73077-71**
**Date Collected: 04/28/21 09:30**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 260.9 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 17:19 | SK | TAL SAC |

## Client Sample ID: PWS-FD02-042821
**Lab Sample ID: 320-73077-73**
**Date Collected: 04/28/21 12:02**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.8 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 17:28 | SK | TAL SAC |

## Client Sample ID: PWS1084-OS-042821-100
**Lab Sample ID: 320-73077-74**
**Date Collected: 04/28/21 10:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 268.4 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 17:37 | SK | TAL SAC |

## Client Sample ID: PWS1164-IS-042821-100
**Lab Sample ID: 320-73077-76**
**Date Collected: 04/28/21 11:20**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 268.2 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 17:46 | SK | TAL SAC |

## Client Sample ID: PWS1199-IS-042821-100
**Lab Sample ID: 320-73077-78**
**Date Collected: 04/28/21 12:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.6 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 17:55 | SK | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1150-OS-042821-100
## Lab Sample ID: 320-73077-80
**Date Collected: 04/28/21 12:55**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.1 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 18:32 | SK | TAL SAC |

## Client Sample ID: PWS1158-OS-042821-100
## Lab Sample ID: 320-73077-82
**Date Collected: 04/28/21 14:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 262.9 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 18:41 | SK | TAL SAC |

## Client Sample ID: PWS1177-OS-042821-100
## Lab Sample ID: 320-73077-84
**Date Collected: 04/28/21 15:35**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 259.9 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 18:50 | SK | TAL SAC |

## Client Sample ID: PWS1178-OS-042821-100
## Lab Sample ID: 320-73077-86
**Date Collected: 04/28/21 16:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.1 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 18:59 | SK | TAL SAC |

## Client Sample ID: PWS1102-OS-042821-100
## Lab Sample ID: 320-73077-88
**Date Collected: 04/28/21 17:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.4 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 19:08 | SK | TAL SAC |

## Client Sample ID: PWS1186-IS-042821-100
## Lab Sample ID: 320-73077-90
**Date Collected: 04/28/21 17:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.5 mL | 10.0 mL | 485969 | 05/05/21 04:32 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 486909 | 05/06/21 19:17 | SK | TAL SAC |

**Laboratory References:**
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73077-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73077-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73077-1 | PWS1132-OS-042621-100 | Water | 04/26/21 09:45 | 04/30/21 09:50 | |
| 320-73077-3 | PWS1105-OS-042621-100 | Water | 04/26/21 10:40 | 04/30/21 09:50 | |
| 320-73077-5 | PWS-FD02-042621 | Water | 04/26/21 12:02 | 04/30/21 09:50 | |
| 320-73077-6 | PWS1182-OS-042621-100 | Water | 04/26/21 12:05 | 04/30/21 09:50 | |
| 320-73077-8 | PWS1200-OS-042621-100 | Water | 04/26/21 13:00 | 04/30/21 09:50 | |
| 320-73077-10 | PWS1104-OS-042621-100 | Water | 04/26/21 14:30 | 04/30/21 09:50 | |
| 320-73077-12 | PWS1167-OS-042621-100 | Water | 04/26/21 15:55 | 04/30/21 09:50 | |
| 320-73077-14 | PWS1097-OS-042621-100 | Water | 04/26/21 17:45 | 04/30/21 09:50 | |
| 320-73077-16 | PWS1005-OS-042721-100 | Water | 04/27/21 08:33 | 04/30/21 09:50 | |
| 320-73077-18 | PWS-FD01-042721 | Water | 04/27/21 12:01 | 04/30/21 09:50 | |
| 320-73077-19 | PWS1080-IS-042721-100 | Water | 04/27/21 09:31 | 04/30/21 09:50 | |
| 320-73077-21 | PWS1052-OS-042721-100 | Water | 04/27/21 15:21 | 04/30/21 09:50 | |
| 320-73077-23 | PWS1042-OS-042721-100 | Water | 04/27/21 16:28 | 04/30/21 09:50 | |
| 320-73077-25 | PWS1071-IS-042721-100 | Water | 04/27/21 17:13 | 04/30/21 09:50 | |
| 320-73077-27 | PWS1010-IS-042721-100 | Water | 04/27/21 18:26 | 04/30/21 09:50 | |
| 320-73077-29 | PWS1066-OS-042721-100 | Water | 04/27/21 19:07 | 04/30/21 09:50 | |
| 320-73077-31 | PWS1091-OS-042721-100 | Water | 04/27/21 09:30 | 04/30/21 09:50 | |
| 320-73077-33 | PWS-FD02-042721 | Water | 04/27/21 12:02 | 04/30/21 09:50 | |
| 320-73077-34 | PWS1187-OS-042721-100 | Water | 04/27/21 10:20 | 04/30/21 09:50 | |
| 320-73077-36 | PWS1086-OS-042721-100 | Water | 04/27/21 11:05 | 04/30/21 09:50 | |
| 320-73077-38 | PWS1099-OS-042721-100 | Water | 04/27/21 11:45 | 04/30/21 09:50 | |
| 320-73077-40 | PWS1096-OS-042721-100 | Water | 04/27/21 12:30 | 04/30/21 09:50 | |
| 320-73077-42 | PWS1090-OS-042721-100 | Water | 04/27/21 13:50 | 04/30/21 09:50 | |
| 320-73077-44 | PWS1098-OS-042721-100 | Water | 04/27/21 14:45 | 04/30/21 09:50 | |
| 320-73077-46 | PWS1093-OS-042721-100 | Water | 04/27/21 15:50 | 04/30/21 09:50 | |
| 320-73077-48 | PWS1094-OS-042721-100 | Water | 04/27/21 17:00 | 04/30/21 09:50 | |
| 320-73077-50 | PWS1121-OS-042721-100 | Water | 04/27/21 18:00 | 04/30/21 09:50 | |
| 320-73077-52 | PWS1129-OS-042821-100 | Water | 04/28/21 08:32 | 04/30/21 09:50 | |
| 320-73077-54 | PWS-FD01-042821 | Water | 04/28/21 12:01 | 04/30/21 09:50 | |
| 320-73077-55 | PWS1115-OS-042821-100 | Water | 04/28/21 09:28 | 04/30/21 09:50 | |
| 320-73077-57 | PWS1001-OS-042821-100 | Water | 04/28/21 10:11 | 04/30/21 09:50 | |
| 320-73077-59 | PWS1082-OS-042821-100 | Water | 04/28/21 12:27 | 04/30/21 09:50 | |
| 320-73077-61 | PWS1141-OS-042821-100 | Water | 04/28/21 14:23 | 04/30/21 09:50 | |
| 320-73077-63 | PWS1050-OS-042821-100 | Water | 04/28/21 15:10 | 04/30/21 09:50 | |
| 320-73077-65 | PWS1095-IS-042821-100 | Water | 04/28/21 16:03 | 04/30/21 09:50 | |
| 320-73077-67 | PWS1111-OS-042821-100 | Water | 04/28/21 17:04 | 04/30/21 09:50 | |
| 320-73077-69 | PWS1085-OS-042821-100 | Water | 04/28/21 08:45 | 04/30/21 09:50 | |
| 320-73077-71 | PWS1118-OS-042821-100 | Water | 04/28/21 09:30 | 04/30/21 09:50 | |
| 320-73077-73 | PWS-FD02-042821 | Water | 04/28/21 12:02 | 04/30/21 09:50 | |
| 320-73077-74 | PWS1084-OS-042821-100 | Water | 04/28/21 10:10 | 04/30/21 09:50 | |
| 320-73077-76 | PWS1164-IS-042821-100 | Water | 04/28/21 11:20 | 04/30/21 09:50 | |
| 320-73077-78 | PWS1199-IS-042821-100 | Water | 04/28/21 12:10 | 04/30/21 09:50 | |
| 320-73077-80 | PWS1150-OS-042821-100 | Water | 04/28/21 12:55 | 04/30/21 09:50 | |
| 320-73077-82 | PWS1158-OS-042821-100 | Water | 04/28/21 14:50 | 04/30/21 09:50 | |
| 320-73077-84 | PWS1177-OS-042821-100 | Water | 04/28/21 15:35 | 04/30/21 09:50 | |
| 320-73077-86 | PWS1178-OS-042821-100 | Water | 04/28/21 16:15 | 04/30/21 09:50 | |
| 320-73077-88 | PWS1102-OS-042821-100 | Water | 04/28/21 17:05 | 04/30/21 09:50 | |
| 320-73077-90 | PWS1186-IS-042821-100 | Water | 04/28/21 17:45 | 04/30/21 09:50 | |

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Ailtucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.024 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Ailtucker@Eurofinset.com | | Page: 1 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

Preservation Codes:

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

320-73077 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1132-OS-042621-100 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | |
| PWS1132-OS-042621-200 | 4/26/2021 | 950 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042621 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | Parent sample is: PWS1132-OS-042621-100 |
| PWS-MSD02-042621 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | Parent sample is: PWS1132-OS-042621-100 |
| PWS1105-OS-042621-100 | 4/26/2021 | 1040 | G | Water | N | N | X | 2 | |
| PWS1105-OS-042621-200 | 4/26/2021 | 1045 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042621 | 4/26/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1182-OS-042621-100 | 4/26/2021 | 1205 | G | Water | N | N | X | 2 | |
| PWS1182-OS-042621-200 | 4/26/2021 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1200-OS-042621-100 | 4/26/2021 | 1300 | G | Water | N | N | X | 2 | |
| PWS1200-OS-042621-200 | 4/26/2021 | 1305 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Kamina Casey | 4-29-21@1500 | Wood | Mark Adamiak | 4/30/21 950 | EMA Svc |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0 c, 1.4, 1.0, 2.0

1502716, 1502717, 1502712, 1502713, 1502714, 1502715, 1502718, 1502719, 1502720, 1502721, 1502722, 1502723, 1502724, 1502725

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.025 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 9 |
| Company: Wood E&I Solutions inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1104-OS-042621-100 | 4/26/2021 | 1430 | G | Water | N | N | X | 2 | |
| PWS1104-OS-042621-200 | 4/26/2021 | 1435 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| ~~PWS1106-OS-042621-100~~ | ~~4/26/2021~~ | ~~1515~~ | ~~G~~ | ~~Water~~ | ~~N~~ | ~~N~~ | ~~X~~ | ~~2~~ | |
| ~~PWS1106-OS-042621-200~~ | ~~4/26/2021~~ | ~~1520~~ | ~~G~~ | ~~Water~~ | ~~N~~ | ~~N~~ | ~~X~~ | ~~2~~ | ~~HOLD, pending analysis of -100 sample~~ |
| PWS1167-OS-042621-100 | 4/26/2021 | 1555 | G | Water | N | N | X | 2 | |
| PWS1167-OS-042621-200 | 4/26/2021 | 1600 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1097-OS-042621-100 | 4/26/2021 | 1745 | G | Water | N | N | X | 2 | |
| PWS1097-OS-042621-200 | 4/26/2021 | 1750 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1005-OS-042721-100 | 4/27/2021 | 833 | G | Water | N | Y | X | 2 | |
| PWS1005-OS-042721-200 | 4/27/2021 | 813 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042721 | 4/27/2021 | 1201 | G | Water | N | N | X | 2 | |

KMC 4-29-21
KMC 4-29-21

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 Cancel

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kenina Casey | 4-29-21@1500 | Wood | Mark Hennessy | 4/30/21 9:50 | ESTA Sac |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|
| 0 | 1502716, 1502717 1502772 | 0.6, 1.1, 1.3, 1.1, 1.0 C, 1.4, 1.0, 2.0 |

1502713, 1502714, 1502715, 1502718, 1502719, 1502770, 1502771, 1502722, 1502723, 1502724, 1502725

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.026 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1080-IS-042721-100 | 4/27/2021 | 931 | G | Water | N | N | X | 2 | |
| PWS1080-IS-042721-200 | 4/27/2021 | 912 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1052-OS-042721-100 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | |
| PWS1052-OS-042721-200 | 4/27/2021 | 1506 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042721 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | Parent sample is: PWS1052-OS-042721-100 |
| PWS-MSD01-042721 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | Parent sample is: PWS1052-OS-042721-100 |
| PWS1042-OS-042721-100 | 4/27/2021 | 1628 | G | Water | N | N | X | 2 | |
| PWS1042-OS-042721-200 | 4/27/2021 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1071-IS-042721-100 | 4/27/2021 | 1713 | G | Water | N | N | X | 2 | |
| PWS1071-IS-042721-200 | 4/27/2021 | 1656 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1010-IS-042721-100 | 4/27/2021 | 1826 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Marina Casey | 4-29-21@1500 | Wood | Mark Hennecke | 4/30/21 9:50 | ETA Sac |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0 c, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723

1502724 1502725 1502726

Ver: 01/16/2019



5/13/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.027 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madison | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1010-IS-042721-200 | 4/27/2021 | 1806 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1066-OS-042721-100 | 4/27/2021 | 1907 | G | Water | N | N | X | 2 | |
| PWS1066-OS-042721-200 | 4/27/2021 | 1850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1091-OS-042721-100 | 4/27/2021 | 930 | G | Water | N | N | X | 2 | |
| PWS1091-OS-042721-200 | 4/27/2021 | 935 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042721 | 4/27/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1187-OS-042721-100 | 4/27/2021 | 1020 | G | Water | N | Y | X | 2 | |
| PWS1187-OS-042721-200 | 4/27/2021 | 1025 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1086-OS-042721-100 | 4/27/2021 | 1105 | G | Water | N | N | X | 2 | |
| PWS1086-OS-042721-200 | 4/27/2021 | 1110 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1099-OS-042721-100 | 4/27/2021 | 1145 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4-29-21@1500 | Wood | | 4/30/21 9:50 | ETA SAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717, 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.4, 1.0 c, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723

1502724 1502725

Ver: 01/16/2019



5/13/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.026 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6793 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1099-OS-042721-200 | 4/27/2021 | 1150 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1096-OS-042721-100 | 4/27/2021 | 1230 | G | Water | N | N | X | 2 | |
| PWS1096-OS-042721-200 | 4/27/2021 | 1235 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1090-OS-042721-100 | 4/27/2021 | 1350 | G | Water | N | N | X | 2 | |
| PWS1090-OS-042721-200 | 4/27/2021 | 1355 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1098-OS-042721-100 | 4/27/2021 | 1445 | G | Water | N | N | X | 2 | |
| PWS1098-OS-042721-200 | 4/27/2021 | 1450 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1093-OS-042721-100 | 4/27/2021 | 1550 | G | Water | N | N | X | 2 | |
| PWS1093-OS-042721-200 | 4/27/2021 | 1555 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1094-OS-042721-100 | 4/27/2021 | 1700 | G | Water | N | N | X | 2 | |
| PWS1094-OS-042721-200 | 4/27/2021 | 1705 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Date/Time | Company | | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: Kenina Casey | 4-29-21@1500 | Wood | Received by: Mary C Abercrombie | 4/30/21 9:50 | ~~ETA~~ Sec |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723

1502724 1502725

Ver: 01/16/2019



5/13/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.029 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 7 |
| Company: Wood E&I Solutions inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1121-OS-042721-100 | 4/27/2021 | 1800 | G | Water | N | N | X | 2 | |
| PWS1121-OS-042721-200 | 4/27/2021 | 1805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1129-OS-042821-100 | 4/28/2021 | 832 | G | Water | N | N | X | 2 | |
| PWS1129-OS-042821-200 | 4/28/2021 | 809 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042821 | 4/28/2021 | 1201 | G | Water | N | N | X | 2 | |
| PWS1115-OS-042821-100 | 4/28/2021 | 928 | G | Water | N | N | X | 2 | |
| PWS1115-OS-042821-200 | 4/28/2021 | 910 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1001-OS-042821-100 | 4/28/2021 | 1011 | G | Water | N | N | X | 2 | |
| PWS1001-OS-042821-200 | 4/28/2021 | 954 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1082-OS-042821-100 | 4/28/2021 | 1227 | G | Water | N | N | X | 2 | |
| PWS1082-OS-042821-200 | 4/28/2021 | 1201 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| | Karina Casey | 4-29-21 @ 1500 | Wood | Mark Abercrombie | 4/30/21 9:50 | ESTA Sac |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1502716 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724 1502725

Ver: 01/16/2019



5/13/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Allitucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.030 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 229-6293 | E-Mail: David.Allitucker@Eurofinset.com | | Page: 7 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

**Preservation Codes:**

A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1141-OS-042821-100 | 4/28/2021 | 1423 | G | Water | N | N | X | 2 | |
| PWS1141-OS-042821-200 | 4/28/2021 | 1354 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1050-OS-042821-100 | 4/28/2021 | 1510 | G | Water | N | N | X | 2 | |
| PWS1050-OS-042821-200 | 4/28/2021 | 1449 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1095-IS-042821-100 | 4/28/2021 | 1603 | G | Water | N | N | X | 2 | |
| PWS1095-IS-042821-200 | 4/28/2021 | 1533 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1111-OS-042821-100 | 4/28/2021 | 1704 | G | Water | N | N | X | 2 | |
| PWS1111-OS-042821-200 | 4/28/2021 | 1647 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1085-OS-042821-100 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | |
| PWS1085-OS-042821-200 | 4/28/2021 | 850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042821 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1085-OS-042821-100 |

**Possible Hazard Identification**

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-29-21 @ 1500 | Wood | Mark Hernandez | 4/30/21 0950 | ETA Sac |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 C, 1.4, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724 1502725

Ver: 01/16/2019



5/13/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.031 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 226-6200 | E Mail: David.Alltucker@Eurofinset.com | | Page: 8 of 9 |
| Company: Wood E&I Solutions inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS-MSD02-042821 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1085-OS-042821-100 |
| PWS1118-OS-042821-100 | 4/28/2021 | 930 | G | Water | N | Y | X | 2 | |
| PWS1118-OS-042821-200 | 4/28/2021 | 935 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042821 | 4/28/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1084-OS-042821-100 | 4/28/2021 | 1010 | G | Water | N | N | X | 2 | |
| PWS1084-OS-042821-200 | 4/28/2021 | 1015 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1164-IS-042821-100 | 4/28/2021 | 1120 | G | Water | N | N | X | 2 | |
| PWS1164-IS-042821-200 | 4/28/2021 | 1125 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1199-IS-042821-100 | 4/28/2021 | 1210 | G | Water | N | N | X | 2 | |
| PWS1199-IS-042821-200 | 4/28/2021 | 1215 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1150-OS-042821-100 | 4/28/2021 | 1255 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Kristina Casey | 4-29-21@ 1500 | Wood | Mark Hennecken | 4/30/21 9:50 | ETASac |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1502716, 1502717 1502712 | Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 C, 1.4, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724

1502691



5/13/2021 (Rev. 1)

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.032 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

Analysis Requested

Preservation Codes:

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1150-OS-042821-200 | 4/28/2021 | 1300 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1158-OS-042821-100 | 4/28/2021 | 1450 | G | Water | N | Y | X | 2 | |
| PWS1158-OS-042821-200 | 4/28/2021 | 1455 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1177-OS-042821-100 | 4/28/2021 | 1535 | G | Water | N | N | X | 2 | |
| PWS1177-OS-042821-200 | 4/28/2021 | 1540 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1178-OS-042821-100 | 4/28/2021 | 1615 | G | Water | N | N | X | 2 | |
| PWS1178-OS-042821-200 | 4/28/2021 | 1620 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1102-OS-042821-100 | 4/28/2021 | 1705 | G | Water | N | N | X | 2 | |
| PWS1102-OS-042821-200 | 4/28/2021 | 1710 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1186-IS-042821-100 | 4/28/2021 | 1745 | G | Water | N | N | X | 2 | |
| PWS1186-IS-042821-200 | 4/28/2021 | 1750 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4-29-21@1500 | Wood | | 4/30/21 0950 | ETA Sac |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 c, 1.4, 2.0

1502725

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724

Ver: 01/16/2019



5/13/2021 (Rev. 1)

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73077-1

**Login Number: 73077**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1502712, 1502713, 1502714, 1502715, 1502716, 1502717, 1502718, 1502719, 1502720. |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73172-1
Client Project/Site: WDNR - Campbell PW Sampling

For:
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*Authorized for release by:*
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*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| *5+ | Isotope dilution analyte is outside acceptance limits, high biased. |
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Job ID: 320-73172-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73172-1**

**Receipt**
The samples were received on 5/4/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 1.0º C, 1.1º C, 1.3º C and 2.6º C.

**LCMS**
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

Method 537 (modified): Several Isotope Dilution Analyte (IDA) recovery are above the method recommended limit for the following sample: PWS1073-OS-043021-100 (320-73172-35). The sample was re-analyzed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

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

**Organic Prep**
Method 3535: The following samples were yellow and contained a thin layer of sediment at the bottom of the bottle prior to extraction: PWS1012-OS-042921-100 (320-73172-6) and PWS1191-OS-042921-100 (320-73172-10).

Method 3535: The following sample contained floating particulates in the sample bottle prior to extraction: PWS1036-OS-043021-100 (320-73172-45).

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-486679.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS1180-OS-042921-100 — Lab Sample ID: 320-73172-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.22 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD01-042921 — Lab Sample ID: 320-73172-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.52 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.9 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1013-OS-042921-100 — Lab Sample ID: 320-73172-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.9 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J I | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.63 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.2 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1012-OS-042921-100 — Lab Sample ID: 320-73172-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 12 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.5 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.55 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.0 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1076-OS-042921-100 — Lab Sample ID: 320-73172-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.49 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.51 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1191-OS-042921-100 — Lab Sample ID: 320-73172-10

No Detections.

## Client Sample ID: PWS1147-OS-042921-100 — Lab Sample ID: 320-73172-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.8 | | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.82 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.65 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.26 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.7 | I | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.98 | J | 1.9 | 0.94 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS-FD02-042921 — Lab Sample ID: 320-73172-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.7 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.90 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.8 | J | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.55 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.27 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.6 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1089-OS-042921-100 — Lab Sample ID: 320-73172-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanoic acid (PFPeA) | 0.91 | J | 1.9 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.1 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.0 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.41 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.4 | I | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.5 | | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1101-OS-042921-100 — Lab Sample ID: 320-73172-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.24 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.56 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1092-OS-042921-100 — Lab Sample ID: 320-73172-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.4 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.73 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.33 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.91 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.8 | | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1125-OS-042921-100 — Lab Sample ID: 320-73172-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.74 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.7 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.49 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 10 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.1 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS1155-OS-042921-100 — Lab Sample ID: 320-73172-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.1 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.96 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.7 | J | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.1 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.29 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.5 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.8 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1127-OS-042921-100 — Lab Sample ID: 320-73172-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.99 | J | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.84 | J I | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.80 | J I | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.3 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.9 | | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1106-OS-042921-100 — Lab Sample ID: 320-73172-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.35 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.51 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.55 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1161-OS-042921-100 — Lab Sample ID: 320-73172-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.70 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.1 | | 1.8 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1114-OS-042921-100 — Lab Sample ID: 320-73172-31

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanoic acid (PFOA) | 0.92 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.2 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1070-OS-043021-100 — Lab Sample ID: 320-73172-33

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.80 | J | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS1073-OS-043021-100 — Lab Sample ID: 320-73172-35

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.9 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.1 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.0 | | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.0 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.4 | | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1174-OS-043021-100 — Lab Sample ID: 320-73172-37

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.5 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.7 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.88 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.4 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.0 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.97 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1019-OS-043021-100 — Lab Sample ID: 320-73172-39

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.7 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.42 | J | 1.8 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.87 | J | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.7 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1044-OS-043021-100 — Lab Sample ID: 320-73172-41

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 19 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | J | 1.9 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.9 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 6.7 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.36 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.8 | J | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1034-IS-043021-100 — Lab Sample ID: 320-73172-43

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 11 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.5 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.3 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.5 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.32 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.9 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1034-IS-043021-100 (Continued) — Lab Sample ID: 320-73172-43

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1036-OS-043021-100 — Lab Sample ID: 320-73172-45

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.9 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.90 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.4 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.75 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.4 | J | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1023-OS-043021-100 — Lab Sample ID: 320-73172-47

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 18 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.89 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.5 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.6 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.52 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.4 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 16 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1088-OS-043021-100 — Lab Sample ID: 320-73172-49

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.3 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.0 | | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.9 | | 1.8 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.7 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.8 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1103-OS-043021-100 — Lab Sample ID: 320-73172-51

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 4.7 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.94 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.2 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.5 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 2.2 | | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 8.8 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1134-OS-043021-100 — Lab Sample ID: 320-73172-53

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.6 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.47 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.82 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1134-OS-043021-100 (Continued) — Lab Sample ID: 320-73172-53

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanoic acid (PFOA) | 2.5 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.34 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 12 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.1 | | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.1 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS-FD02-043021 — Lab Sample ID: 320-73172-55

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.7 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.77 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.4 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 13 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.28 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 4.0 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 4.0 | | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1135-OS-043021-100 — Lab Sample ID: 320-73172-56

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.6 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.57 | J | 1.9 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.56 | J | 1.9 | 0.29 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 12 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.79 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.1 | | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1136-OS-043021-100 — Lab Sample ID: 320-73172-58

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.4 | J | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.5 | J | 1.8 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.4 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.3 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.5 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.30 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 40 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.58 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.9 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.32 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.5 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.7 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1195-OS-043021-100 — Lab Sample ID: 320-73172-60

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanoic acid (PFDA) | 0.36 | J | 2.1 | 0.32 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.9 | J | 2.1 | 1.0 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS1189-OS-043021-100 — Lab Sample ID: 320-73172-62

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.97 | J | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.31 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.6 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.3 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 5.6 | I | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.3 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1110-IS-043021-100 — Lab Sample ID: 320-73172-64

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.0 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.7 | J | 1.9 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.7 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.56 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.0 | J | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.19 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.60 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1063-OS-043021-100 — Lab Sample ID: 320-73172-66

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 190 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.67 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 6.2 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 9.2 | | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 8.2 | | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 14 | | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.74 | J I | 1.9 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 24 | I | 1.9 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.9 | 0.92 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1160-OS-043021-100 — Lab Sample ID: 320-73172-68

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.41 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.65 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.53 | J | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.5 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1180-OS-042921-100
**Lab Sample ID: 320-73172-1**

**Date Collected: 04/29/21 09:27**
**Matrix: Water**

**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.22** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 16:36 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |
| *13C5 PFPeA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |
| *13C2 PFHxA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |
| *13C4 PFHpA* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |
| *13C4 PFOA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |
| *13C5 PFNA* | *118* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:36* | *1* |

## Client Sample ID: PWS1180-OS-042921-100
**Lab Sample ID: 320-73172-1**

**Date Collected: 04/29/21 09:27**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 110 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C2 PFUnA | 111 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C2 PFDoA | 112 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C2 PFTeDA | 112 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C2 PFHxDA | 115 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C3 PFBS | 101 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 18O2 PFHxS | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C4 PFOS | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C8 FOSA | 111 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| M2-4:2 FTS | 106 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| M2-6:2 FTS | 138 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| M2-8:2 FTS | 139 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C2 10:2 FTS | 135 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| 13C3 HFPO-DA | 113 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d3-NMeFOSAA | 104 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d5-NEtFOSAA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d-N-MeFOSA-M | 87 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d-N-EtFOSA-M | 92 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d7-N-MeFOSE-M | 108 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |
| d9-N-EtFOSE-M | 102 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:36 | 1 |

## Client Sample ID: PWS-FD01-042921
**Lab Sample ID: 320-73172-3**

**Date Collected: 04/29/21 12:01**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.5 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.77 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.52** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS-FD01-042921**
**Date Collected: 04/29/21 12:01**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.9** | | 1.8 | 0.89 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/06/21 04:24 | 05/10/21 16:45 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *115* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFHxA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C4 PFHpA* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C4 PFOA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C5 PFNA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFDA* | *115* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFUnA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFDoA* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFTeDA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 PFHxDA* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C3 PFBS* | *102* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *18O2 PFHxS* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C4 PFOS* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C8 FOSA* | *114* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *M2-4:2 FTS* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *M2-6:2 FTS* | *129* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *M2-8:2 FTS* | *137* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *13C3 HFPO-DA* | *115* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d3-NMeFOSAA* | *101* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d5-NEtFOSAA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d-N-MeFOSA-M* | *92* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d-N-EtFOSA-M* | *88* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d7-N-MeFOSE-M* | *101* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |
| *d9-N-EtFOSE-M* | *102* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 16:45* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1013-OS-042921-100**
**Lab Sample ID: 320-73172-4**
**Date Collected: 04/29/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.9** | | 4.8 | 2.3 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.47 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.9 | 0.81 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.1** | **J I** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.63** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.2** | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/11/21 10:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *78* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:29* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:29* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:29* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:29* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:29* | *1* |

## Client Sample ID: PWS1013-OS-042921-100
**Lab Sample ID: 320-73172-4**
**Date Collected: 04/29/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 104 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 PFDA | 99 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 PFDoA | 103 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 PFTeDA | 92 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C3 PFBS | 74 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C4 PFOS | 87 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| M2-4:2 FTS | 130 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| M2-6:2 FTS | 135 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| M2-8:2 FTS | 135 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C2 10:2 FTS | 134 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d3-NMeFOSAA | 102 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d5-NEtFOSAA | 98 | | 25 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d-N-EtFOSA-M | 85 | | 10 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d7-N-MeFOSE-M | 98 | | 10 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |
| d9-N-EtFOSE-M | 94 | | 10 - 150 | 05/06/21 04:24 | 05/11/21 10:29 | 1 |

## Client Sample ID: PWS1012-OS-042921-100
**Lab Sample ID: 320-73172-6**
**Date Collected: 04/29/21 15:45**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **12** | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.5** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.55** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1012-OS-042921-100**
**Date Collected: 04/29/21 15:45**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-6**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.0** | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/11/21 10:57 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C5 PFPeA* | *72* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C4 PFOA* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C5 PFNA* | *117* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFDA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFUnA* | *124* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFDoA* | *118* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 PFHxDA* | *118* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C3 PFBS* | *82* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *18O2 PFHxS* | *96* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C4 PFOS* | *102* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C8 FOSA* | *112* | | *10 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *M2-4:2 FTS* | *138* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *M2-6:2 FTS* | *145* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *M2-8:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C2 10:2 FTS* | *143* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *13C3 HFPO-DA* | *92* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d3-NMeFOSAA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d5-NEtFOSAA* | *118* | | *25 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d-N-MeFOSA-M* | *91* | | *10 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d-N-EtFOSA-M* | *88* | | *10 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |
| *d9-N-EtFOSE-M* | *95* | | *10 - 150* | *05/06/21 04:24* | *05/11/21 10:57* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1076-OS-042921-100**
**Date Collected: 04/29/21 16:27**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-8**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.1** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.49** | **J** | 1.8 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.8 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.51** | **J** | 1.8 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.8 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 17:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:32* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:32* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:32* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:32* | *1* |
| *13C4 PFOA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:32* | *1* |

## Client Sample ID: PWS1076-OS-042921-100

**Lab Sample ID: 320-73172-8**

**Date Collected: 04/29/21 16:27**

**Matrix: Water**

**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 119 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 PFDA | 115 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 PFUnA | 116 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 PFDoA | 113 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 PFTeDA | 121 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 PFHxDA | 122 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C3 PFBS | 92 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 18O2 PFHxS | 105 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C4 PFOS | 113 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C8 FOSA | 117 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| M2-4:2 FTS | 111 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| M2-6:2 FTS | 132 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| M2-8:2 FTS | 119 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C2 10:2 FTS | 135 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| 13C3 HFPO-DA | 99 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d3-NMeFOSAA | 105 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d5-NEtFOSAA | 115 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d-N-MeFOSA-M | 88 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d-N-EtFOSA-M | 97 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d7-N-MeFOSE-M | 101 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |
| d9-N-EtFOSE-M | 102 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 17:32 | 1 |

## Client Sample ID: PWS1191-OS-042921-100

**Lab Sample ID: 320-73172-10**

**Date Collected: 04/29/21 17:38**

**Matrix: Water**

**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.49 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1191-OS-042921-100**
**Date Collected: 04/29/21 17:38**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-10**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 17:42 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C5 PFPeA* | *98* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C4 PFOA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C5 PFNA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFDA* | *111* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFUnA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFDoA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFTeDA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 PFHxDA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C3 PFBS* | *95* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *18O2 PFHxS* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C4 PFOS* | *104* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *M2-4:2 FTS* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *M2-6:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *M2-8:2 FTS* | *128* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C2 10:2 FTS* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *13C3 HFPO-DA* | *99* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d3-NMeFOSAA* | *96* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d5-NEtFOSAA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |
| *d9-N-EtFOSE-M* | *101* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 17:42* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1147-OS-042921-100**
**Date Collected: 04/29/21 08:40**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-12**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.8** | | 4.8 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.82** | **J** | 1.9 | 0.47 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.65** | **J** | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.26** | **J** | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.7** | **I** | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.98** | **J** | 1.9 | 0.94 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/10/21 18:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:19* | *1* |
| *13C5 PFPeA* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:19* | *1* |
| *13C2 PFHxA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:19* | *1* |
| *13C4 PFHpA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:19* | *1* |
| *13C4 PFOA* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:19* | *1* |

## Client Sample ID: PWS1147-OS-042921-100
**Lab Sample ID: 320-73172-12**

**Date Collected: 04/29/21 08:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 126 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 PFDA | 121 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 PFUnA | 122 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 PFDoA | 132 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 PFTeDA | 131 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 PFHxDA | 128 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 18O2 PFHxS | 111 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C4 PFOS | 123 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C8 FOSA | 122 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| M2-4:2 FTS | 126 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| M2-6:2 FTS | 142 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| M2-8:2 FTS | 146 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C2 10:2 FTS | 136 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| 13C3 HFPO-DA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d3-NMeFOSAA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d5-NEtFOSAA | 133 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d-N-MeFOSA-M | 103 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d-N-EtFOSA-M | 107 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d7-N-MeFOSE-M | 120 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |
| d9-N-EtFOSE-M | 120 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:19 | 1 |

## Client Sample ID: PWS-FD02-042921
**Lab Sample ID: 320-73172-14**

**Date Collected: 04/29/21 12:02**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.7** | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.90** | **J** | 1.9 | 0.46 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.8** | **J** | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.55** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.27** | **J** | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |

**Client Sample ID: PWS-FD02-042921**
**Lab Sample ID: 320-73172-14**
**Date Collected: 04/29/21 12:02**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.6** | **I** | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/10/21 18:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFHxA* | *102* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C4 PFOA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C5 PFNA* | *123* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFDA* | *119* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFUnA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFDoA* | *117* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFTeDA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 PFHxDA* | *130* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *18O2 PFHxS* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C4 PFOS* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C8 FOSA* | *118* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *M2-4:2 FTS* | *126* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *M2-6:2 FTS* | *136* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *M2-8:2 FTS* | *149* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C2 10:2 FTS* | *136* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *13C3 HFPO-DA* | *100* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d3-NMeFOSAA* | *117* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d5-NEtFOSAA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d-N-MeFOSA-M* | *98* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d-N-EtFOSA-M* | *97* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d7-N-MeFOSE-M* | *108* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |
| *d9-N-EtFOSE-M* | *102* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:29* | *1* |

## Client Sample ID: PWS1089-OS-042921-100
**Lab Sample ID: 320-73172-15**

**Date Collected: 04/29/21 09:25**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.91** | **J** | 1.9 | 0.45 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.1** | **J** | 1.9 | 0.79 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.0** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.41** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.9 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.4** | **I** | 1.9 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.5** | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 18:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:38* | *1* |
| *13C5 PFPeA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:38* | *1* |
| *13C2 PFHxA* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:38* | *1* |
| *13C4 PFHpA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:38* | *1* |
| *13C4 PFOA* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:38* | *1* |

## Client Sample ID: PWS1089-OS-042921-100
**Lab Sample ID: 320-73172-15**

**Date Collected: 04/29/21 09:25**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 117 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 PFDA | 109 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 PFUnA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 PFDoA | 114 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 PFTeDA | 114 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 PFHxDA | 113 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C3 PFBS | 100 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 18O2 PFHxS | 106 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C4 PFOS | 111 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C8 FOSA | 112 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| M2-4:2 FTS | 106 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| M2-6:2 FTS | 146 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| M2-8:2 FTS | 135 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C2 10:2 FTS | 137 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| 13C3 HFPO-DA | 111 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d3-NMeFOSAA | 112 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d5-NEtFOSAA | 124 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d-N-MeFOSA-M | 93 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d-N-EtFOSA-M | 98 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d7-N-MeFOSE-M | 108 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |
| d9-N-EtFOSE-M | 107 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:38 | 1 |

## Client Sample ID: PWS1101-OS-042921-100
**Lab Sample ID: 320-73172-17**

**Date Collected: 04/29/21 10:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.7 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.24** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.56** | **J** | 1.9 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1101-OS-042921-100**
**Lab Sample ID: 320-73172-17**
**Date Collected: 04/29/21 10:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 18:48 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C5 PFPeA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFHxA* | *102* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C4 PFHpA* | *109* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C4 PFOA* | *119* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C5 PFNA* | *126* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFDA* | *111* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFUnA* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFDoA* | *123* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFTeDA* | *124* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 PFHxDA* | *123* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C3 PFBS* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *18O2 PFHxS* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C4 PFOS* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C8 FOSA* | *113* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *M2-4:2 FTS* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *M2-6:2 FTS* | *141* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *M2-8:2 FTS* | *128* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C2 10:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *13C3 HFPO-DA* | *104* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d3-NMeFOSAA* | *108* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d5-NEtFOSAA* | *129* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d-N-MeFOSA-M* | *95* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d-N-EtFOSA-M* | *94* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d7-N-MeFOSE-M* | *105* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |
| *d9-N-EtFOSE-M* | *111* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 18:48* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1092-OS-042921-100**
**Date Collected: 04/29/21 11:30**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-19**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.6 | 2.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.8 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.4** | **J** | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.73** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.33** | **J** | 1.8 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.91** | **J** | 1.8 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | | 1.8 | 0.90 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 18:57 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:57* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:57* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:57* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:57* | *1* |
| *13C4 PFOA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 18:57* | *1* |

## Client Sample ID: PWS1092-OS-042921-100
**Lab Sample ID: 320-73172-19**

**Date Collected: 04/29/21 11:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 113 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 PFDA | 106 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 PFUnA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 PFDoA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 PFTeDA | 116 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 PFHxDA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C3 PFBS | 95 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 18O2 PFHxS | 99 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C4 PFOS | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C8 FOSA | 115 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| M2-4:2 FTS | 91 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| M2-6:2 FTS | 125 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| M2-8:2 FTS | 112 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C2 10:2 FTS | 123 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| 13C3 HFPO-DA | 95 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d3-NMeFOSAA | 98 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d5-NEtFOSAA | 119 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d-N-MeFOSA-M | 89 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d-N-EtFOSA-M | 95 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d7-N-MeFOSE-M | 102 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |
| d9-N-EtFOSE-M | 100 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 18:57 | 1 |

## Client Sample ID: PWS1125-OS-042921-100
**Lab Sample ID: 320-73172-21**

**Date Collected: 04/29/21 12:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.74** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.7** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.49** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **10** | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.24** | **J** | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1125-OS-042921-100**
**Lab Sample ID: 320-73172-21**
**Date Collected: 04/29/21 12:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.1** | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/10/21 19:07 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFHxA* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C4 PFHpA* | *111* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C4 PFOA* | *120* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C5 PFNA* | *121* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFDA* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFUnA* | *121* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFDoA* | *125* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFTeDA* | *130* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 PFHxDA* | *127* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C3 PFBS* | *103* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *18O2 PFHxS* | *112* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C4 PFOS* | *114* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C8 FOSA* | *118* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *M2-4:2 FTS* | *118* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *M2-6:2 FTS* | *127* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *M2-8:2 FTS* | *131* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C2 10:2 FTS* | *148* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *13C3 HFPO-DA* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d3-NMeFOSAA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d5-NEtFOSAA* | *133* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d-N-MeFOSA-M* | *104* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d-N-EtFOSA-M* | *104* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |
| *d9-N-EtFOSE-M* | *119* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:07* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1155-OS-042921-100**
**Date Collected: 04/29/21 13:20**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-23**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.1** | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.96** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.7** | **J** | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.1** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.29** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.5** | | 1.9 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.8** | | 1.9 | 0.51 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:24 | 05/10/21 19:16 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *104* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C5 PFPeA* | *106* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFHxA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C4 PFOA* | *106* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |

## Client Sample ID: PWS1155-OS-042921-100
**Lab Sample ID: 320-73172-23**
**Date Collected: 04/29/21 13:20**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *119* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFDA* | *117* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFUnA* | *119* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFDoA* | *119* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFTeDA* | *123* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 PFHxDA* | *125* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C3 PFBS* | *101* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *18O2 PFHxS* | *116* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C4 PFOS* | *107* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C8 FOSA* | *114* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *M2-6:2 FTS* | *134* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *M2-8:2 FTS* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C2 10:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *13C3 HFPO-DA* | *105* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d3-NMeFOSAA* | *106* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d5-NEtFOSAA* | *122* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d-N-MeFOSA-M* | *92* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d-N-EtFOSA-M* | *92* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d7-N-MeFOSE-M* | *111* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |
| *d9-N-EtFOSE-M* | *105* | | *10 - 150* | *05/06/21 04:24* | *05/10/21 19:16* | *1* |

## Client Sample ID: PWS1127-OS-042921-100
**Lab Sample ID: 320-73172-25**
**Date Collected: 04/29/21 14:05**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.99** | **J** | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.84** | **J I** | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.80** | **J I** | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1127-OS-042921-100**
**Date Collected: 04/29/21 14:05**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-25**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.3** | **I** | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.9** | | 1.9 | 0.93 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:36 | 05/11/21 02:01 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFHxA* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C4 PFHpA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C4 PFOA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C5 PFNA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFDA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFUnA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFDoA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFTeDA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 PFHxDA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C3 PFBS* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *18O2 PFHxS* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C4 PFOS* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C8 FOSA* | *111* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *M2-4:2 FTS* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *M2-6:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *M2-8:2 FTS* | *125* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C2 10:2 FTS* | *131* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *13C3 HFPO-DA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d3-NMeFOSAA* | *104* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d5-NEtFOSAA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d-N-MeFOSA-M* | *100* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d-N-EtFOSA-M* | *94* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |
| *d9-N-EtFOSE-M* | *106* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:01* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1106-OS-042921-100**
**Date Collected: 04/29/21 14:50**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-27**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.35** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.51** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.55** | **J** | 1.9 | 0.53 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:36 | 05/12/21 13:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |
| *13C5 PFPeA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |
| *13C2 PFHxA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |
| *13C4 PFHpA* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |
| *13C4 PFOA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |
| *13C5 PFNA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/12/21 13:30* | *1* |

## Client Sample ID: PWS1106-OS-042921-100
**Lab Sample ID: 320-73172-27**

**Date Collected: 04/29/21 14:50**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 115 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C2 PFUnA | 133 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C2 PFDoA | 124 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C2 PFTeDA | 110 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C2 PFHxDA | 112 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C3 PFBS | 107 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 18O2 PFHxS | 102 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C4 PFOS | 114 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C8 FOSA | 115 | | 10 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| M2-4:2 FTS | 108 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| M2-6:2 FTS | 123 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| M2-8:2 FTS | 143 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C2 10:2 FTS | 141 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| 13C3 HFPO-DA | 113 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d3-NMeFOSAA | 117 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d5-NEtFOSAA | 137 | | 25 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d-N-MeFOSA-M | 95 | | 10 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d-N-EtFOSA-M | 101 | | 10 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d7-N-MeFOSE-M | 119 | | 10 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |
| d9-N-EtFOSE-M | 128 | | 10 - 150 | 05/06/21 04:36 | 05/12/21 13:30 | 1 |

## Client Sample ID: PWS1161-OS-042921-100
**Lab Sample ID: 320-73172-29**

**Date Collected: 04/29/21 16:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.70** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1161-OS-042921-100**
**Date Collected: 04/29/21 16:10**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-29**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.1** | | 1.8 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 02:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFHxA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C4 PFOA* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C5 PFNA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFDA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFUnA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFDoA* | *118* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFTeDA* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 PFHxDA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C3 PFBS* | *97* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *18O2 PFHxS* | *109* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C4 PFOS* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C8 FOSA* | *112* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *M2-4:2 FTS* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *M2-6:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *M2-8:2 FTS* | *129* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C2 10:2 FTS* | *135* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *13C3 HFPO-DA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d3-NMeFOSAA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d5-NEtFOSAA* | *125* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d-N-MeFOSA-M* | *103* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d-N-EtFOSA-M* | *98* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d7-N-MeFOSE-M* | *111* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |
| *d9-N-EtFOSE-M* | *104* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:19* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1114-OS-042921-100**
**Date Collected: 04/29/21 17:15**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-31**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.92** | **J** | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.2** | **J** | 1.8 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 02:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C2 PFHxA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C4 PFHpA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C4 PFOA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C5 PFNA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |
| *13C2 PFDA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:29* | *1* |

## Client Sample ID: PWS1114-OS-042921-100
**Lab Sample ID: 320-73172-31**

**Date Collected: 04/29/21 17:15**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 124 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C2 PFDoA | 117 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C2 PFTeDA | 114 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C2 PFHxDA | 120 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 18O2 PFHxS | 105 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C4 PFOS | 112 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C8 FOSA | 110 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| M2-4:2 FTS | 104 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| M2-6:2 FTS | 120 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| M2-8:2 FTS | 131 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C2 10:2 FTS | 129 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| 13C3 HFPO-DA | 114 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d3-NMeFOSAA | 108 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d5-NEtFOSAA | 125 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d-N-MeFOSA-M | 93 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d-N-EtFOSA-M | 97 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d7-N-MeFOSE-M | 103 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |
| d9-N-EtFOSE-M | 107 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:29 | 1 |

## Client Sample ID: PWS1070-OS-043021-100
**Lab Sample ID: 320-73172-33**

**Date Collected: 04/30/21 09:34**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.8** | **J** | 4.5 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.80** | **J** | 1.8 | 0.77 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.1** | **J** | 1.8 | 0.27 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.8 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | | 1.8 | 0.49 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1070-OS-043021-100**
**Date Collected: 04/30/21 09:34**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-33**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.8 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/06/21 04:36 | 05/11/21 02:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFHxA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C4 PFOA* | *109* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFDA* | *101* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFUnA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFDoA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFTeDA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 PFHxDA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *18O2 PFHxS* | *98* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C4 PFOS* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *M2-4:2 FTS* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *M2-6:2 FTS* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *M2-8:2 FTS* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C2 10:2 FTS* | *122* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d5-NEtFOSAA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d-N-EtFOSA-M* | *85* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d7-N-MeFOSE-M* | *102* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |
| *d9-N-EtFOSE-M* | *101* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:38* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1073-OS-043021-100**
**Lab Sample ID: 320-73172-35**
**Date Collected: 04/30/21 10:11**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.9** | **J** | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.9 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.1** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.0** | | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.0** | | 1.9 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.4** | | 1.9 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 02:48 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:48* | *1* |
| *13C5 PFPeA* | *76* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:48* | *1* |
| *13C2 PFHxA* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:48* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:48* | *1* |
| *13C4 PFOA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:48* | *1* |

## Client Sample ID: PWS1073-OS-043021-100
**Lab Sample ID: 320-73172-35**
**Date Collected: 04/30/21 10:11**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 129 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 PFDA | 119 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 PFUnA | 133 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 PFDoA | 136 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 PFTeDA | 133 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 PFHxDA | 149 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 18O2 PFHxS | 104 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C4 PFOS | 127 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C8 FOSA | 129 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| M2-4:2 FTS | 157 | *5+ | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| M2-6:2 FTS | 175 | *5+ | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| M2-8:2 FTS | 147 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C2 10:2 FTS | 151 | *5+ | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d3-NMeFOSAA | 115 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d5-NEtFOSAA | 130 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d-N-MeFOSA-M | 113 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d-N-EtFOSA-M | 115 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d7-N-MeFOSE-M | 109 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |
| d9-N-EtFOSE-M | 129 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 02:48 | 1 |

## Client Sample ID: PWS1174-OS-043021-100
**Lab Sample ID: 320-73172-37**
**Date Collected: 04/30/21 10:58**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.5** | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.7** | **J** | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.88** | **J** | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.4** | | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.0** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.97** | **J** | 1.8 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1174-OS-043021-100**
**Date Collected: 04/30/21 10:58**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-37**
**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 02:57 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFHxA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C4 PFOA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C5 PFNA* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFDA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFUnA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFDoA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFTeDA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 PFHxDA* | *128* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C3 PFBS* | *99* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *18O2 PFHxS* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C4 PFOS* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C8 FOSA* | *113* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *M2-4:2 FTS* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *M2-6:2 FTS* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *M2-8:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C2 10:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *13C3 HFPO-DA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d3-NMeFOSAA* | *104* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d5-NEtFOSAA* | *129* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d-N-MeFOSA-M* | *94* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d-N-EtFOSA-M* | *101* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d7-N-MeFOSE-M* | *106* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |
| *d9-N-EtFOSE-M* | *113* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 02:57* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1019-OS-043021-100**
**Lab Sample ID: 320-73172-39**
**Date Collected: 04/30/21 12:36**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.7** | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.42** | **J** | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.87** | **J** | 1.8 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.7** | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 03:06 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:06* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:06* | *1* |
| *13C2 PFHxA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:06* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:06* | *1* |
| *13C4 PFOA* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:06* | *1* |

## Client Sample ID: PWS1019-OS-043021-100
**Lab Sample ID: 320-73172-39**

**Date Collected: 04/30/21 12:36**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 125 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 PFDA | 118 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 PFUnA | 132 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 PFDoA | 123 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 PFTeDA | 130 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 PFHxDA | 138 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C3 PFBS | 83 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 18O2 PFHxS | 108 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C4 PFOS | 109 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C8 FOSA | 115 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| M2-4:2 FTS | 110 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| M2-6:2 FTS | 142 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| M2-8:2 FTS | 140 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C2 10:2 FTS | 145 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| 13C3 HFPO-DA | 107 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d3-NMeFOSAA | 111 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d5-NEtFOSAA | 136 | | 25 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d-N-MeFOSA-M | 99 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d-N-EtFOSA-M | 104 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d7-N-MeFOSE-M | 103 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |
| d9-N-EtFOSE-M | 118 | | 10 - 150 | 05/06/21 04:36 | 05/11/21 03:06 | 1 |

## Client Sample ID: PWS1044-OS-043021-100
**Lab Sample ID: 320-73172-41**

**Date Collected: 04/30/21 14:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **19** | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | **J** | 1.9 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.5** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.9 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.7** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.36** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.9 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1044-OS-043021-100**
**Lab Sample ID: 320-73172-41**
**Date Collected: 04/30/21 14:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.8** | **J** | 1.9 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.9 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 03:44 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C5 PFPeA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFHxA* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C4 PFHpA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C4 PFOA* | *123* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C5 PFNA* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFDA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFUnA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFDoA* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFTeDA* | *126* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 PFHxDA* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C3 PFBS* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *18O2 PFHxS* | *118* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C4 PFOS* | *118* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C8 FOSA* | *126* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *M2-4:2 FTS* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *M2-6:2 FTS* | *140* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *M2-8:2 FTS* | *130* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C2 10:2 FTS* | *143* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *13C3 HFPO-DA* | *104* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d3-NMeFOSAA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d5-NEtFOSAA* | *128* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d-N-MeFOSA-M* | *96* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d-N-EtFOSA-M* | *104* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d7-N-MeFOSE-M* | *106* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |
| *d9-N-EtFOSE-M* | *105* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:44* | *1* |

## Client Sample ID: PWS1034-IS-043021-100

**Date Collected: 04/30/21 15:42**
**Date Received: 05/04/21 10:10**

## Lab Sample ID: 320-73172-43

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **11** | | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.5** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.3** | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.5** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.32** | **J** | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.9** | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:36 | 05/11/21 03:54 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C4 PFOA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |

## Client Sample ID: PWS1034-IS-043021-100
**Lab Sample ID: 320-73172-43**

**Date Collected: 04/30/21 15:42**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFDA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFUnA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFDoA* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFTeDA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 PFHxDA* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C3 PFBS* | *98* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *18O2 PFHxS* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C4 PFOS* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C8 FOSA* | *113* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *M2-4:2 FTS* | *101* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *M2-6:2 FTS* | *128* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *M2-8:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C2 10:2 FTS* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d3-NMeFOSAA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d5-NEtFOSAA* | *124* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d-N-MeFOSA-M* | *92* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d-N-EtFOSA-M* | *98* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d7-N-MeFOSE-M* | *103* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |
| *d9-N-EtFOSE-M* | *106* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 03:54* | *1* |

## Client Sample ID: PWS1036-OS-043021-100
**Lab Sample ID: 320-73172-45**

**Date Collected: 04/30/21 16:35**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.9** | | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.90** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.4** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.75** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1036-OS-043021-100**
**Date Collected: 04/30/21 16:35**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-45**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.4** | **J** | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.9 | 0.93 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 04:36 | 05/11/21 04:03 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C5 PFPeA* | *76* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C4 PFOA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C5 PFNA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFDA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFUnA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFDoA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFTeDA* | *109* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 PFHxDA* | *122* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C4 PFOS* | *95* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *M2-4:2 FTS* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *M2-6:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *M2-8:2 FTS* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C2 10:2 FTS* | *123* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *13C3 HFPO-DA* | *98* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d3-NMeFOSAA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d5-NEtFOSAA* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d-N-MeFOSA-M* | *81* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d-N-EtFOSA-M* | *89* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d7-N-MeFOSE-M* | *103* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |
| *d9-N-EtFOSE-M* | *94* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:03* | *1* |

## Client Sample ID: PWS1023-OS-043021-100

**Date Collected: 04/30/21 17:13**
**Date Received: 05/04/21 10:10**

## Lab Sample ID: 320-73172-47

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **18** | | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.89** | **J** | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.5** | | 1.8 | 0.77 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.6** | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.52** | **J** | 1.8 | 0.27 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.4** | | 1.8 | 0.52 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **16** | | 1.8 | 0.49 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.8 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/06/21 04:36 | 05/11/21 04:12 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *102* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFHxA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C4 PFOA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |

## Client Sample ID: PWS1023-OS-043021-100
**Lab Sample ID: 320-73172-47**

**Date Collected: 04/30/21 17:13**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *124* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFDA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFUnA* | *124* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFDoA* | *123* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFTeDA* | *132* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 PFHxDA* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C3 PFBS* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *18O2 PFHxS* | *100* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C4 PFOS* | *118* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C8 FOSA* | *117* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *M2-4:2 FTS* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *M2-6:2 FTS* | *126* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *M2-8:2 FTS* | *142* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C2 10:2 FTS* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *13C3 HFPO-DA* | *109* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d3-NMeFOSAA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d5-NEtFOSAA* | *124* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d-N-MeFOSA-M* | *95* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d-N-EtFOSA-M* | *98* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d7-N-MeFOSE-M* | *109* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |
| *d9-N-EtFOSE-M* | *118* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:12* | *1* |

## Client Sample ID: PWS1088-OS-043021-100
**Lab Sample ID: 320-73172-49**

**Date Collected: 04/30/21 18:31**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.3** | **J** | 4.6 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.0** | | 1.8 | 0.45 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.9** | | 1.8 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.68 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.7** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.8 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |

## Client Sample ID: PWS1088-OS-043021-100
**Lab Sample ID: 320-73172-49**

**Date Collected: 04/30/21 18:31**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.8 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 04:22 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *112* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C5 PFPeA* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFHxA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C4 PFHpA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C4 PFOA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C5 PFNA* | *119* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFDA* | *105* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFUnA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFDoA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFTeDA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 PFHxDA* | *128* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C3 PFBS* | *98* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *18O2 PFHxS* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C4 PFOS* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C8 FOSA* | *116* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *M2-4:2 FTS* | *126* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *M2-6:2 FTS* | *139* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *M2-8:2 FTS* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C2 10:2 FTS* | *140* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *13C3 HFPO-DA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d3-NMeFOSAA* | *101* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d5-NEtFOSAA* | *123* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d-N-MeFOSA-M* | *98* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d-N-EtFOSA-M* | *99* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d7-N-MeFOSE-M* | *100* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |
| *d9-N-EtFOSE-M* | *110* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:22* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1103-OS-043021-100**
**Lab Sample ID: 320-73172-51**
**Date Collected: 04/30/21 08:45**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.8** | **J** | 4.7 | 2.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.94** | **J** | 1.9 | 0.46 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.2** | | 1.9 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.5** | | 1.9 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **2.2** | | 1.9 | 0.28 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **8.8** | | 1.9 | 0.53 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 04:31 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *120* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFHxA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C4 PFHpA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C4 PFOA* | *113* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |

## Client Sample ID: PWS1103-OS-043021-100
**Lab Sample ID: 320-73172-51**

**Date Collected: 04/30/21 08:45**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFDA* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFUnA* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFDoA* | *106* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFTeDA* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 PFHxDA* | *123* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C3 PFBS* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *18O2 PFHxS* | *110* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C4 PFOS* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C8 FOSA* | *121* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *M2-4:2 FTS* | *104* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *M2-6:2 FTS* | *135* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *M2-8:2 FTS* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C2 10:2 FTS* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *13C3 HFPO-DA* | *103* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d3-NMeFOSAA* | *97* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d5-NEtFOSAA* | *107* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d-N-MeFOSA-M* | *92* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d-N-EtFOSA-M* | *91* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d7-N-MeFOSE-M* | *109* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |
| *d9-N-EtFOSE-M* | *106* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 04:31* | *1* |

## Client Sample ID: PWS1134-OS-043021-100
**Lab Sample ID: 320-73172-53**

**Date Collected: 04/30/21 09:35**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.6** | | 4.7 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.47** | **J** | 1.9 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.82** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.5** | | 1.9 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.34** | **J** | 1.9 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **12** | | 1.9 | 0.19 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.1** | | 1.9 | 0.54 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1134-OS-043021-100**
**Lab Sample ID: 320-73172-53**
**Date Collected: 04/30/21 09:35**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **4.1** | | 1.9 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.9 | 0.93 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 12:56 | 05/08/21 13:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *66* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFHxA* | *76* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C4 PFOA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C5 PFNA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFDA* | *78* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFUnA* | *90* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFTeDA* | *78* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *18O2 PFHxS* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C4 PFOS* | *96* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *M2-4:2 FTS* | *121* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *M2-6:2 FTS* | *119* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *M2-8:2 FTS* | *108* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C2 10:2 FTS* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *13C3 HFPO-DA* | *66* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d3-NMeFOSAA* | *92* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d5-NEtFOSAA* | *96* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d-N-EtFOSA-M* | *69* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d7-N-MeFOSE-M* | *69* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |
| *d9-N-EtFOSE-M* | *72* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:29* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS-FD02-043021**
**Date Collected: 04/30/21 12:02**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-55**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.7** | | 4.4 | 2.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.77** | **J** | 1.8 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.4** | | 1.8 | 0.75 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **13** | | 1.8 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.28** | **J** | 1.8 | 0.26 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **4.0** | | 1.8 | 0.50 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **4.0** | | 1.8 | 0.47 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.32 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.8 | 0.86 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/06/21 12:56 | 05/08/21 13:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:38* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:38* | *1* |
| *13C2 PFHxA* | *75* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:38* | *1* |
| *13C4 PFHpA* | *79* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:38* | *1* |
| *13C4 PFOA* | *81* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:38* | *1* |

## Client Sample ID: PWS-FD02-043021
**Lab Sample ID: 320-73172-55**
**Date Collected: 04/30/21 12:02**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 77 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 PFDA | 78 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 PFUnA | 83 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 PFDoA | 80 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 PFHxDA | 87 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C3 PFBS | 83 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 18O2 PFHxS | 89 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C8 FOSA | 88 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| M2-4:2 FTS | 111 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| M2-6:2 FTS | 100 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| M2-8:2 FTS | 104 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C2 10:2 FTS | 96 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| 13C3 HFPO-DA | 69 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d5-NEtFOSAA | 91 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d7-N-MeFOSE-M | 68 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |
| d9-N-EtFOSE-M | 68 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:38 | 1 |

## Client Sample ID: PWS1135-OS-043021-100
**Lab Sample ID: 320-73172-56**
**Date Collected: 04/30/21 10:00**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.6** | **J** | 4.7 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.57** | **J** | 1.9 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.56** | **J** | 1.9 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **12** | | 1.9 | 0.19 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.79** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1135-OS-043021-100**
**Date Collected: 04/30/21 10:00**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-56**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.1** | | 1.9 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 12:56 | 05/08/21 13:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFHxA* | *81* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C4 PFHpA* | *85* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFDA* | *83* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFTeDA* | *78* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 PFHxDA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C3 PFBS* | *91* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *18O2 PFHxS* | *97* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C4 PFOS* | *97* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *M2-4:2 FTS* | *127* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *M2-6:2 FTS* | *124* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *M2-8:2 FTS* | *112* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C2 10:2 FTS* | *105* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *13C3 HFPO-DA* | *75* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d3-NMeFOSAA* | *85* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d5-NEtFOSAA* | *99* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |
| *d9-N-EtFOSE-M* | *81* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 13:47* | *1* |

**Client Sample ID: PWS1136-OS-043021-100**
**Lab Sample ID: 320-73172-58**
**Date Collected: 04/30/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.4** | **J** | 4.5 | 2.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.5** | **J** | 1.8 | 0.44 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.4** | | 1.8 | 0.53 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.3** | **J** | 1.8 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.5** | | 1.8 | 0.77 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.30** | **J** | 1.8 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **40** | | 1.8 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.58** | **J** | 1.8 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.9** | | 1.8 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.32** | **J** | 1.8 | 0.17 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.5** | | 1.8 | 0.49 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.7** | | 1.8 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/06/21 12:56 | 05/08/21 13:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:56* | *1* |
| *13C5 PFPeA* | *102* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:56* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:56* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:56* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:56* | *1* |

## Client Sample ID: PWS1136-OS-043021-100
**Lab Sample ID: 320-73172-58**

**Date Collected: 04/30/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 102 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 PFDA | 96 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 PFUnA | 109 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 PFDoA | 107 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 PFTeDA | 91 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 PFHxDA | 96 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C3 PFBS | 105 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 18O2 PFHxS | 109 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C4 PFOS | 107 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C8 FOSA | 115 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| M2-4:2 FTS | 136 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| M2-6:2 FTS | 129 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| M2-8:2 FTS | 110 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C2 10:2 FTS | 118 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d3-NMeFOSAA | 111 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d5-NEtFOSAA | 113 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d-N-MeFOSA-M | 85 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |
| d9-N-EtFOSE-M | 96 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:56 | 1 |

## Client Sample ID: PWS1195-OS-043021-100
**Lab Sample ID: 320-73172-60**

**Date Collected: 04/30/21 11:50**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.2 | 2.5 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.1 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.1 | 0.61 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.1 | 0.26 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.1 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.1 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.36** | **J** | 2.1 | 0.32 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.1 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.1 | 0.57 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.1 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.1 | 0.76 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.1 | 0.93 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.1 | 0.98 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.1 | 0.21 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.1 | 0.31 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.1 | 0.60 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.1 | 0.20 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.1 | 0.56 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.1 | 0.39 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1195-OS-043021-100**
**Date Collected: 04/30/21 11:50**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-60**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.1 | 0.33 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.1 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.9** | **J** | 2.1 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NMeFOSA | ND | | 2.1 | 0.45 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NEtFOSA | ND | | 2.1 | 0.91 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NMeFOSAA | ND | | 5.2 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NEtFOSAA | ND | | 5.2 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NMeFOSE | ND | | 4.2 | 1.5 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| NEtFOSE | ND | | 2.1 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| 4:2 FTS | ND | | 2.1 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| 6:2 FTS | ND | | 5.2 | 2.6 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| 8:2 FTS | ND | | 2.1 | 0.48 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| 10:2 FTS | ND | | 2.1 | 0.70 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| HFPO-DA (GenX) | ND | | 4.2 | 1.6 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| F-53B Major | ND | | 2.1 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| F-53B Minor | ND | | 2.1 | 0.33 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.1 | 0.42 | ng/L | | 05/06/21 12:56 | 05/08/21 14:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *63* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C5 PFPeA* | *70* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFHxA* | *68* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C4 PFHpA* | *74* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C4 PFOA* | *72* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C5 PFNA* | *77* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFDA* | *69* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFUnA* | *80* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFDoA* | *75* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFTeDA* | *73* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 PFHxDA* | *78* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C4 PFOS* | *85* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *M2-4:2 FTS* | *98* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *M2-6:2 FTS* | *93* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *M2-8:2 FTS* | *95* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C2 10:2 FTS* | *96* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *13C3 HFPO-DA* | *62* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d-N-MeFOSA-M* | *67* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d7-N-MeFOSE-M* | *67* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |
| *d9-N-EtFOSE-M* | *72* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:05* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1189-OS-043021-100**
**Date Collected: 04/30/21 13:40**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-62**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.8** | **J** | 4.6 | 2.2 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.53 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.97** | **J** | 1.8 | 0.78 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.31** | **J** | 1.8 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.6** | **J** | 1.8 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.3** | **J** | 1.8 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.8 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **5.6** | **I** | 1.8 | 0.49 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.3** | **J** | 1.8 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/06/21 12:56 | 05/08/21 14:14 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *68* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:14* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:14* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:14* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:14* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:14* | *1* |

## Client Sample ID: PWS1189-OS-043021-100
**Lab Sample ID: 320-73172-62**

**Date Collected: 04/30/21 13:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 87 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 PFDA | 91 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 PFDoA | 90 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 PFTeDA | 79 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 PFHxDA | 87 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 18O2 PFHxS | 95 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C8 FOSA | 104 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| M2-4:2 FTS | 130 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| M2-6:2 FTS | 122 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| 13C3 HFPO-DA | 74 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d3-NMeFOSAA | 88 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d5-NEtFOSAA | 106 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d-N-MeFOSA-M | 83 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d7-N-MeFOSE-M | 75 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 14:14 | 1 |

## Client Sample ID: PWS1110-IS-043021-100
**Lab Sample ID: 320-73172-64**

**Date Collected: 04/30/21 13:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.0** | **J** | 4.7 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.7** | **J** | 1.9 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.7** | **J** | 1.9 | 0.55 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.56** | **J** | 1.9 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.0** | **J** | 1.9 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.19** | **J** | 1.9 | 0.19 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.60** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1110-IS-043021-100**
**Lab Sample ID: 320-73172-64**
**Date Collected: 04/30/21 13:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.93 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 12:56 | 05/08/21 14:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFUnA* | *108* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFTeDA* | *93* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C3 PFBS* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *18O2 PFHxS* | *98* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C4 PFOS* | *98* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C8 FOSA* | *109* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *M2-4:2 FTS* | *132* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *M2-6:2 FTS* | *118* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *M2-8:2 FTS* | *125* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C2 10:2 FTS* | *109* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d3-NMeFOSAA* | *102* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d5-NEtFOSAA* | *111* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |
| *d9-N-EtFOSE-M* | *100* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 14:23* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1063-OS-043021-100**
**Date Collected: 04/30/21 14:31**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-66**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **190** | | 4.7 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.67** | **J** | 1.9 | 0.54 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **6.2** | | 1.9 | 0.80 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **9.2** | | 1.9 | 0.19 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **8.2** | | 1.9 | 0.28 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **14** | | 1.9 | 0.53 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.74** | **J I** | 1.9 | 0.18 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **24** | **I** | 1.9 | 0.51 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.9 | 0.92 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/06/21 12:56 | 05/08/21 15:00 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:00* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:00* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:00* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:00* | *1* |
| *13C4 PFOA* | *84* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:00* | *1* |

## Client Sample ID: PWS1063-OS-043021-100
**Lab Sample ID: 320-73172-66**
**Date Collected: 04/30/21 14:31**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 83 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 PFDA | 85 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 PFUnA | 89 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 PFDoA | 88 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C3 PFBS | 86 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 18O2 PFHxS | 94 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C4 PFOS | 94 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C8 FOSA | 97 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| M2-4:2 FTS | 122 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| M2-6:2 FTS | 106 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| M2-8:2 FTS | 113 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C2 10:2 FTS | 106 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| 13C3 HFPO-DA | 75 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d3-NMeFOSAA | 89 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d5-NEtFOSAA | 103 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d7-N-MeFOSE-M | 79 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |
| d9-N-EtFOSE-M | 80 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 15:00 | 1 |

## Client Sample ID: PWS1160-OS-043021-100
**Lab Sample ID: 320-73172-68**
**Date Collected: 04/30/21 17:29**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.2 | 2.0 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.72 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.41** | **J** | 1.7 | 0.17 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.65** | **J** | 1.7 | 0.48 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

**Client Sample ID: PWS1160-OS-043021-100**
**Date Collected: 04/30/21 17:29**
**Date Received: 05/04/21 10:10**

**Lab Sample ID: 320-73172-68**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **0.53** | **J** | 1.7 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.5** | **J** | 1.7 | 0.83 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/06/21 12:56 | 05/08/21 15:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C5 PFPeA* | *90* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C5 PFNA* | *98* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C3 PFBS* | *97* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *18O2 PFHxS* | *101* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C4 PFOS* | *103* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C8 FOSA* | *111* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *M2-4:2 FTS* | *138* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *M2-6:2 FTS* | *139* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *M2-8:2 FTS* | *120* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C2 10:2 FTS* | *113* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d3-NMeFOSAA* | *86* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d5-NEtFOSAA* | *91* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d7-N-MeFOSE-M* | *83* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *05/06/21 12:56* | *05/08/21 15:09* | *1* |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-73172-1 | PWS1180-OS-042921-100 | 114 | 113 | 108 | 112 | 122 | 118 | 110 | 111 |
| 320-73172-3 | PWS-FD01-042921 | 115 | 103 | 108 | 105 | 114 | 113 | 115 | 110 |
| 320-73172-4 | PWS1013-OS-042921-100 | 78 | 81 | 99 | 89 | 95 | 104 | 99 | 100 |
| 320-73172-4 MS | PWS-MS01-042921 | 79 | 80 | 97 | 98 | 100 | 109 | 107 | 108 |
| 320-73172-4 MSD | PWS-MSD01-042921 | 74 | 75 | 92 | 97 | 112 | 114 | 107 | 126 |
| 320-73172-6 | PWS1012-OS-042921-100 | 76 | 72 | 93 | 99 | 112 | 117 | 114 | 124 |
| 320-73172-8 | PWS1076-OS-042921-100 | 93 | 93 | 100 | 99 | 109 | 119 | 115 | 116 |
| 320-73172-10 | PWS1191-OS-042921-100 | 105 | 98 | 100 | 107 | 110 | 113 | 111 | 114 |
| 320-73172-12 | PWS1147-OS-042921-100 | 109 | 107 | 109 | 109 | 116 | 126 | 121 | 122 |
| 320-73172-14 | PWS-FD02-042921 | 103 | 97 | 102 | 104 | 114 | 123 | 119 | 122 |
| 320-73172-15 | PWS1089-OS-042921-100 | 116 | 108 | 107 | 114 | 116 | 117 | 109 | 118 |
| 320-73172-17 | PWS1101-OS-042921-100 | 108 | 108 | 102 | 109 | 119 | 126 | 111 | 116 |
| 320-73172-19 | PWS1092-OS-042921-100 | 107 | 103 | 101 | 110 | 113 | 113 | 106 | 118 |
| 320-73172-21 | PWS1125-OS-042921-100 | 101 | 96 | 114 | 111 | 120 | 121 | 112 | 121 |
| 320-73172-23 | PWS1155-OS-042921-100 | 104 | 106 | 110 | 107 | 106 | 119 | 117 | 119 |
| 320-73172-25 | PWS1127-OS-042921-100 | 108 | 103 | 105 | 113 | 113 | 117 | 108 | 110 |
| 320-73172-27 | PWS1106-OS-042921-100 | 120 | 119 | 120 | 114 | 116 | 120 | 115 | 133 |
| 320-73172-29 | PWS1161-OS-042921-100 | 105 | 97 | 111 | 106 | 114 | 119 | 113 | 112 |
| 320-73172-31 | PWS1114-OS-042921-100 | 113 | 103 | 115 | 117 | 112 | 115 | 108 | 124 |
| 320-73172-33 | PWS1070-OS-043021-100 | 99 | 94 | 103 | 104 | 109 | 106 | 101 | 112 |
| 320-73172-35 | PWS1073-OS-043021-100 | 86 | 76 | 105 | 107 | 112 | 129 | 119 | 133 |
| 320-73172-37 | PWS1174-OS-043021-100 | 102 | 94 | 107 | 110 | 119 | 121 | 111 | 116 |
| 320-73172-39 | PWS1019-OS-043021-100 | 85 | 79 | 102 | 101 | 114 | 125 | 118 | 132 |
| 320-73172-41 | PWS1044-OS-043021-100 | 115 | 119 | 105 | 116 | 123 | 127 | 119 | 116 |
| 320-73172-43 | PWS1034-IS-043021-100 | 92 | 85 | 100 | 103 | 111 | 119 | 117 | 117 |
| 320-73172-45 | PWS1036-OS-043021-100 | 76 | 76 | 90 | 96 | 108 | 112 | 102 | 111 |
| 320-73172-47 | PWS1023-OS-043021-100 | 102 | 92 | 107 | 110 | 112 | 124 | 117 | 124 |
| 320-73172-49 | PWS1088-OS-043021-100 | 112 | 106 | 110 | 111 | 113 | 119 | 105 | 120 |
| 320-73172-51 | PWS1103-OS-043021-100 | 120 | 103 | 107 | 108 | 113 | 121 | 106 | 108 |
| 320-73172-51 MS | PWS-MS02-043021 | 110 | 104 | 105 | 110 | 106 | 115 | 108 | 113 |
| 320-73172-51 MSD | PWS-MSD02-043021 | 118 | 107 | 112 | 117 | 114 | 123 | 114 | 119 |
| 320-73172-53 | PWS1134-OS-043021-100 | 66 | 78 | 76 | 81 | 84 | 84 | 78 | 90 |
| 320-73172-55 | PWS-FD02-043021 | 62 | 74 | 75 | 79 | 81 | 77 | 78 | 83 |
| 320-73172-56 | PWS1135-OS-043021-100 | 72 | 81 | 81 | 85 | 89 | 88 | 83 | 89 |
| 320-73172-58 | PWS1136-OS-043021-100 | 95 | 102 | 92 | 100 | 100 | 102 | 96 | 109 |
| 320-73172-60 | PWS1195-OS-043021-100 | 63 | 70 | 68 | 74 | 72 | 77 | 69 | 80 |
| 320-73172-62 | PWS1189-OS-043021-100 | 68 | 81 | 85 | 88 | 87 | 87 | 91 | 91 |
| 320-73172-64 | PWS1110-IS-043021-100 | 92 | 99 | 94 | 100 | 100 | 101 | 95 | 108 |
| 320-73172-66 | PWS1063-OS-043021-100 | 72 | 84 | 79 | 84 | 84 | 83 | 85 | 89 |
| 320-73172-68 | PWS1160-OS-043021-100 | 80 | 90 | 90 | 95 | 100 | 98 | 91 | 97 |
| LCS 320-486416/2-A | Lab Control Sample | 113 | 106 | 105 | 110 | 111 | 119 | 112 | 112 |
| LCS 320-486417/2-A | Lab Control Sample | 114 | 113 | 115 | 119 | 115 | 128 | 114 | 120 |
| LCS 320-486679/2-A | Lab Control Sample | 77 | 75 | 74 | 82 | 78 | 81 | 78 | 87 |
| LCSD 320-486679/3-A | Lab Control Sample Dup | 67 | 70 | 67 | 70 | 72 | 73 | 69 | 80 |
| MB 320-486416/1-A | Method Blank | 106 | 101 | 99 | 113 | 110 | 115 | 110 | 107 |
| MB 320-486417/1-A | Method Blank | 115 | 111 | 117 | 117 | 115 | 127 | 117 | 129 |
| MB 320-486679/1-A | Method Blank | 67 | 68 | 61 | 67 | 70 | 72 | 69 | 72 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-73172-1 | PWS1180-OS-042921-100 | 112 | 112 | 115 | 101 | 108 | 108 | 111 | 106 |
| 320-73172-3 | PWS-FD01-042921 | 105 | 108 | 112 | 102 | 105 | 107 | 114 | 105 |
| 320-73172-4 | PWS1013-OS-042921-100 | 103 | 92 | 93 | 74 | 86 | 87 | 95 | 130 |
| 320-73172-4 MS | PWS-MS01-042921 | 116 | 103 | 117 | 77 | 90 | 92 | 100 | 117 |
| 320-73172-4 MSD | PWS-MSD01-042921 | 114 | 107 | 117 | 76 | 92 | 92 | 101 | 113 |
| 320-73172-6 | PWS1012-OS-042921-100 | 118 | 100 | 118 | 82 | 96 | 102 | 112 | 138 |
| 320-73172-8 | PWS1076-OS-042921-100 | 113 | 121 | 122 | 92 | 105 | 113 | 117 | 111 |
| 320-73172-10 | PWS1191-OS-042921-100 | 109 | 110 | 113 | 95 | 105 | 104 | 103 | 110 |
| 320-73172-12 | PWS1147-OS-042921-100 | 132 | 131 | 128 | 94 | 111 | 123 | 122 | 126 |
| 320-73172-14 | PWS-FD02-042921 | 117 | 122 | 130 | 94 | 109 | 114 | 118 | 126 |
| 320-73172-15 | PWS1089-OS-042921-100 | 114 | 114 | 113 | 100 | 106 | 111 | 112 | 106 |
| 320-73172-17 | PWS1101-OS-042921-100 | 123 | 124 | 123 | 108 | 110 | 113 | 113 | 112 |
| 320-73172-19 | PWS1092-OS-042921-100 | 108 | 116 | 118 | 95 | 99 | 108 | 115 | 91 |
| 320-73172-21 | PWS1125-OS-042921-100 | 125 | 130 | 127 | 103 | 112 | 114 | 118 | 118 |
| 320-73172-23 | PWS1155-OS-042921-100 | 119 | 123 | 125 | 101 | 116 | 107 | 114 | 106 |
| 320-73172-25 | PWS1127-OS-042921-100 | 117 | 115 | 115 | 102 | 111 | 114 | 111 | 107 |
| 320-73172-27 | PWS1106-OS-042921-100 | 124 | 110 | 112 | 107 | 102 | 114 | 115 | 108 |
| 320-73172-29 | PWS1161-OS-042921-100 | 118 | 114 | 119 | 97 | 109 | 115 | 112 | 110 |
| 320-73172-31 | PWS1114-OS-042921-100 | 117 | 114 | 120 | 94 | 105 | 112 | 110 | 104 |
| 320-73172-33 | PWS1070-OS-043021-100 | 110 | 110 | 116 | 94 | 98 | 103 | 103 | 103 |
| 320-73172-35 | PWS1073-OS-043021-100 | 136 | 133 | 149 | 94 | 104 | 127 | 129 | 157 *5+ |
| 320-73172-37 | PWS1174-OS-043021-100 | 117 | 120 | 128 | 99 | 113 | 120 | 113 | 105 |
| 320-73172-39 | PWS1019-OS-043021-100 | 123 | 130 | 138 | 83 | 108 | 109 | 115 | 110 |
| 320-73172-41 | PWS1044-OS-043021-100 | 127 | 126 | 139 | 108 | 118 | 118 | 126 | 103 |
| 320-73172-43 | PWS1034-IS-043021-100 | 121 | 117 | 127 | 98 | 106 | 111 | 113 | 101 |
| 320-73172-45 | PWS1036-OS-043021-100 | 112 | 109 | 122 | 74 | 86 | 95 | 100 | 110 |
| 320-73172-47 | PWS1023-OS-043021-100 | 123 | 132 | 139 | 105 | 100 | 118 | 117 | 117 |
| 320-73172-49 | PWS1088-OS-043021-100 | 116 | 116 | 128 | 98 | 117 | 116 | 116 | 126 |
| 320-73172-51 | PWS1103-OS-043021-100 | 106 | 110 | 123 | 108 | 110 | 111 | 121 | 104 |
| 320-73172-51 MS | PWS-MS02-043021 | 116 | 118 | 116 | 108 | 110 | 112 | 110 | 110 |
| 320-73172-51 MSD | PWS-MSD02-043021 | 115 | 118 | 114 | 106 | 116 | 116 | 117 | 98 |
| 320-73172-53 | PWS1134-OS-043021-100 | 84 | 78 | 95 | 90 | 100 | 96 | 98 | 121 |
| 320-73172-55 | PWS-FD02-043021 | 80 | 78 | 87 | 83 | 89 | 86 | 88 | 111 |
| 320-73172-56 | PWS1135-OS-043021-100 | 89 | 78 | 89 | 91 | 97 | 97 | 100 | 127 |
| 320-73172-58 | PWS1136-OS-043021-100 | 107 | 91 | 96 | 105 | 109 | 107 | 115 | 136 |
| 320-73172-60 | PWS1195-OS-043021-100 | 75 | 73 | 78 | 85 | 94 | 85 | 91 | 98 |
| 320-73172-62 | PWS1189-OS-043021-100 | 90 | 79 | 87 | 90 | 95 | 92 | 104 | 130 |
| 320-73172-64 | PWS1110-IS-043021-100 | 96 | 93 | 92 | 100 | 98 | 98 | 109 | 132 |
| 320-73172-66 | PWS1063-OS-043021-100 | 88 | 78 | 82 | 86 | 94 | 94 | 97 | 122 |
| 320-73172-68 | PWS1160-OS-043021-100 | 89 | 94 | 93 | 97 | 101 | 103 | 111 | 138 |
| LCS 320-486416/2-A | Lab Control Sample | 109 | 110 | 117 | 101 | 113 | 110 | 110 | 117 |
| LCS 320-486417/2-A | Lab Control Sample | 116 | 118 | 122 | 107 | 118 | 119 | 115 | 113 |
| LCS 320-486679/2-A | Lab Control Sample | 82 | 81 | 85 | 86 | 90 | 89 | 91 | 94 |
| LCSD 320-486679/3-A | Lab Control Sample Dup | 73 | 81 | 80 | 77 | 86 | 81 | 81 | 96 |
| MB 320-486416/1-A | Method Blank | 108 | 110 | 108 | 102 | 104 | 108 | 109 | 104 |
| MB 320-486417/1-A | Method Blank | 117 | 118 | 116 | 108 | 108 | 121 | 116 | 132 |
| MB 320-486679/1-A | Method Blank | 76 | 64 | 69 | 77 | 79 | 77 | 82 | 82 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOSA (25-150) | d5NEFOSA (25-150) | dMeFOSAA (10-150) | dEtFOSAA (10-150) |
| 320-73172-1 | PWS1180-OS-042921-100 | 138 | 139 | 135 | 113 | 104 | 118 | 87 | 92 |
| 320-73172-3 | PWS-FD01-042921 | 129 | 137 | 122 | 115 | 101 | 122 | 92 | 88 |
| 320-73172-4 | PWS1013-OS-042921-100 | 135 | 135 | 134 | 97 | 102 | 98 | 81 | 85 |
| 320-73172-4 MS | PWS-MS01-042921 | 133 | 132 | 129 | 94 | 108 | 127 | 77 | 84 |
| 320-73172-4 MSD | PWS-MSD01-042921 | 135 | 122 | 130 | 87 | 101 | 116 | 83 | 87 |
| 320-73172-6 | PWS1012-OS-042921-100 | 145 | 130 | 143 | 92 | 114 | 118 | 91 | 88 |
| 320-73172-8 | PWS1076-OS-042921-100 | 132 | 119 | 135 | 99 | 105 | 115 | 88 | 97 |
| 320-73172-10 | PWS1191-OS-042921-100 | 132 | 128 | 116 | 99 | 96 | 114 | 88 | 86 |
| 320-73172-12 | PWS1147-OS-042921-100 | 142 | 146 | 136 | 108 | 118 | 133 | 103 | 107 |
| 320-73172-14 | PWS-FD02-042921 | 136 | 149 | 136 | 100 | 117 | 122 | 98 | 97 |
| 320-73172-15 | PWS1089-OS-042921-100 | 146 | 135 | 137 | 111 | 112 | 124 | 93 | 98 |
| 320-73172-17 | PWS1101-OS-042921-100 | 141 | 128 | 132 | 104 | 108 | 129 | 95 | 94 |
| 320-73172-19 | PWS1092-OS-042921-100 | 125 | 112 | 123 | 95 | 98 | 119 | 89 | 95 |
| 320-73172-21 | PWS1125-OS-042921-100 | 127 | 131 | 148 | 105 | 113 | 133 | 104 | 104 |
| 320-73172-23 | PWS1155-OS-042921-100 | 134 | 110 | 132 | 105 | 106 | 122 | 92 | 92 |
| 320-73172-25 | PWS1127-OS-042921-100 | 130 | 125 | 131 | 108 | 104 | 116 | 100 | 94 |
| 320-73172-27 | PWS1106-OS-042921-100 | 123 | 143 | 141 | 113 | 117 | 137 | 95 | 101 |
| 320-73172-29 | PWS1161-OS-042921-100 | 130 | 129 | 135 | 111 | 111 | 125 | 103 | 98 |
| 320-73172-31 | PWS1114-OS-042921-100 | 120 | 131 | 129 | 114 | 108 | 125 | 93 | 97 |
| 320-73172-33 | PWS1070-OS-043021-100 | 114 | 105 | 122 | 96 | 93 | 111 | 88 | 85 |
| 320-73172-35 | PWS1073-OS-043021-100 | 175 *5+ | 147 | 151 *5+ | 97 | 115 | 130 | 113 | 115 |
| 320-73172-37 | PWS1174-OS-043021-100 | 139 | 130 | 130 | 107 | 104 | 129 | 94 | 101 |
| 320-73172-39 | PWS1019-OS-043021-100 | 142 | 140 | 145 | 107 | 111 | 136 | 99 | 104 |
| 320-73172-41 | PWS1044-OS-043021-100 | 140 | 130 | 143 | 104 | 112 | 128 | 96 | 104 |
| 320-73172-43 | PWS1034-IS-043021-100 | 128 | 132 | 139 | 96 | 102 | 124 | 92 | 98 |
| 320-73172-45 | PWS1036-OS-043021-100 | 132 | 115 | 123 | 98 | 102 | 121 | 81 | 89 |
| 320-73172-47 | PWS1023-OS-043021-100 | 126 | 142 | 139 | 109 | 112 | 124 | 95 | 98 |
| 320-73172-49 | PWS1088-OS-043021-100 | 139 | 127 | 140 | 103 | 101 | 123 | 98 | 99 |
| 320-73172-51 | PWS1103-OS-043021-100 | 135 | 121 | 114 | 103 | 97 | 107 | 92 | 91 |
| 320-73172-51 MS | PWS-MS02-043021 | 124 | 124 | 121 | 109 | 108 | 108 | 97 | 90 |
| 320-73172-51 MSD | PWS-MSD02-043021 | 116 | 118 | 126 | 106 | 106 | 124 | 93 | 96 |
| 320-73172-53 | PWS1134-OS-043021-100 | 119 | 108 | 100 | 66 | 92 | 96 | 78 | 69 |
| 320-73172-55 | PWS-FD02-043021 | 100 | 104 | 96 | 69 | 84 | 91 | 64 | 64 |
| 320-73172-56 | PWS1135-OS-043021-100 | 124 | 112 | 105 | 75 | 85 | 99 | 73 | 71 |
| 320-73172-58 | PWS1136-OS-043021-100 | 129 | 110 | 118 | 90 | 111 | 113 | 85 | 77 |
| 320-73172-60 | PWS1195-OS-043021-100 | 93 | 95 | 96 | 62 | 77 | 90 | 67 | 67 |
| 320-73172-62 | PWS1189-OS-043021-100 | 122 | 108 | 108 | 74 | 88 | 106 | 83 | 76 |
| 320-73172-64 | PWS1110-IS-043021-100 | 118 | 125 | 109 | 89 | 102 | 111 | 79 | 79 |
| 320-73172-66 | PWS1063-OS-043021-100 | 106 | 113 | 106 | 75 | 89 | 103 | 71 | 66 |
| 320-73172-68 | PWS1160-OS-043021-100 | 139 | 120 | 113 | 87 | 86 | 91 | 78 | 71 |
| LCS 320-486416/2-A | Lab Control Sample | 137 | 136 | 133 | 104 | 102 | 110 | 88 | 94 |
| LCS 320-486417/2-A | Lab Control Sample | 129 | 138 | 126 | 105 | 104 | 125 | 92 | 97 |
| LCS 320-486679/2-A | Lab Control Sample | 105 | 99 | 99 | 70 | 82 | 87 | 62 | 63 |
| LCSD 320-486679/3-A | Lab Control Sample Dup | 93 | 90 | 93 | 63 | 79 | 77 | 63 | 62 |
| MB 320-486416/1-A | Method Blank | 130 | 137 | 132 | 108 | 108 | 118 | 87 | 93 |
| MB 320-486417/1-A | Method Blank | 127 | 137 | 136 | 117 | 114 | 125 | 94 | 109 |
| MB 320-486679/1-A | Method Blank | 81 | 90 | 89 | 59 | 79 | 82 | 50 | 52 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| 320-73172-1 | PWS1180-OS-042921-100 | 108 | 102 | | | | | | | | |
| 320-73172-3 | PWS-FD01-042921 | 101 | 102 | | | | | | | | |
| 320-73172-4 | PWS1013-OS-042921-100 | 98 | 94 | | | | | | | | |
| 320-73172-4 MS | PWS-MS01-042921 | 108 | 96 | | | | | | | | |
| 320-73172-4 MSD | PWS-MSD01-042921 | 98 | 111 | | | | | | | | |
| 320-73172-6 | PWS1012-OS-042921-100 | 93 | 95 | | | | | | | | |
| 320-73172-8 | PWS1076-OS-042921-100 | 101 | 102 | | | | | | | | |
| 320-73172-10 | PWS1191-OS-042921-100 | 96 | 101 | | | | | | | | |
| 320-73172-12 | PWS1147-OS-042921-100 | 120 | 120 | | | | | | | | |
| 320-73172-14 | PWS-FD02-042921 | 108 | 102 | | | | | | | | |
| 320-73172-15 | PWS1089-OS-042921-100 | 108 | 107 | | | | | | | | |
| 320-73172-17 | PWS1101-OS-042921-100 | 105 | 111 | | | | | | | | |
| 320-73172-19 | PWS1092-OS-042921-100 | 102 | 100 | | | | | | | | |
| 320-73172-21 | PWS1125-OS-042921-100 | 95 | 119 | | | | | | | | |
| 320-73172-23 | PWS1155-OS-042921-100 | 111 | 105 | | | | | | | | |
| 320-73172-25 | PWS1127-OS-042921-100 | 95 | 106 | | | | | | | | |
| 320-73172-27 | PWS1106-OS-042921-100 | 119 | 128 | | | | | | | | |
| 320-73172-29 | PWS1161-OS-042921-100 | 111 | 104 | | | | | | | | |
| 320-73172-31 | PWS1114-OS-042921-100 | 103 | 107 | | | | | | | | |
| 320-73172-33 | PWS1070-OS-043021-100 | 102 | 101 | | | | | | | | |
| 320-73172-35 | PWS1073-OS-043021-100 | 109 | 129 | | | | | | | | |
| 320-73172-37 | PWS1174-OS-043021-100 | 106 | 113 | | | | | | | | |
| 320-73172-39 | PWS1019-OS-043021-100 | 103 | 118 | | | | | | | | |
| 320-73172-41 | PWS1044-OS-043021-100 | 106 | 105 | | | | | | | | |
| 320-73172-43 | PWS1034-IS-043021-100 | 103 | 106 | | | | | | | | |
| 320-73172-45 | PWS1036-OS-043021-100 | 103 | 94 | | | | | | | | |
| 320-73172-47 | PWS1023-OS-043021-100 | 109 | 118 | | | | | | | | |
| 320-73172-49 | PWS1088-OS-043021-100 | 100 | 110 | | | | | | | | |
| 320-73172-51 | PWS1103-OS-043021-100 | 109 | 106 | | | | | | | | |
| 320-73172-51 MS | PWS-MS02-043021 | 110 | 105 | | | | | | | | |
| 320-73172-51 MSD | PWS-MSD02-043021 | 114 | 104 | | | | | | | | |
| 320-73172-53 | PWS1134-OS-043021-100 | 69 | 72 | | | | | | | | |
| 320-73172-55 | PWS-FD02-043021 | 68 | 68 | | | | | | | | |
| 320-73172-56 | PWS1135-OS-043021-100 | 74 | 81 | | | | | | | | |
| 320-73172-58 | PWS1136-OS-043021-100 | 93 | 96 | | | | | | | | |
| 320-73172-60 | PWS1195-OS-043021-100 | 67 | 72 | | | | | | | | |
| 320-73172-62 | PWS1189-OS-043021-100 | 75 | 85 | | | | | | | | |
| 320-73172-64 | PWS1110-IS-043021-100 | 93 | 100 | | | | | | | | |
| 320-73172-66 | PWS1063-OS-043021-100 | 79 | 80 | | | | | | | | |
| 320-73172-68 | PWS1160-OS-043021-100 | 83 | 87 | | | | | | | | |
| LCS 320-486416/2-A | Lab Control Sample | 105 | 111 | | | | | | | | |
| LCS 320-486417/2-A | Lab Control Sample | 103 | 112 | | | | | | | | |
| LCS 320-486679/2-A | Lab Control Sample | 75 | 82 | | | | | | | | |
| LCSD 320-486679/3-A | Lab Control Sample Dup | 71 | 74 | | | | | | | | |
| MB 320-486416/1-A | Method Blank | 106 | 100 | | | | | | | | |
| MB 320-486417/1-A | Method Blank | 111 | 113 | | | | | | | | |
| MB 320-486679/1-A | Method Blank | 67 | 62 | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-486416/1-A**
**Matrix: Water**
**Analysis Batch: 487484**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/06/21 04:24 | 05/10/21 16:17 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *106* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |
| *13C4 PFHpA* | *113* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |
| *13C4 PFOA* | *110* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |
| *13C5 PFNA* | *115* | | *25 - 150* | *05/06/21 04:24* | *05/10/21 16:17* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-486416/1-A**
**Matrix: Water**
**Analysis Batch: 487484**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 110 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C2 PFUnA | 107 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C2 PFDoA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C2 PFTeDA | 110 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C2 PFHxDA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C3 PFBS | 102 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 18O2 PFHxS | 104 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C4 PFOS | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C8 FOSA | 109 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| M2-4:2 FTS | 104 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| M2-6:2 FTS | 130 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| M2-8:2 FTS | 137 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C2 10:2 FTS | 132 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| 13C3 HFPO-DA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d3-NMeFOSAA | 108 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d5-NEtFOSAA | 118 | | 25 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d-N-MeFOSA-M | 87 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d-N-EtFOSA-M | 93 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d7-N-MeFOSE-M | 106 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |
| d9-N-EtFOSE-M | 100 | | 10 - 150 | 05/06/21 04:24 | 05/10/21 16:17 | 1 |

**Lab Sample ID: LCS 320-486416/2-A**
**Matrix: Water**
**Analysis Batch: 487484**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 38.6 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 38.4 | | ng/L | | 96 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.6 | | ng/L | | 109 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.3 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 33.7 | | ng/L | | 93 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-486416/2-A**
**Matrix: Water**
**Analysis Batch: 487484**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.4 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 39.1 | | ng/L | | 105 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.0 | | ng/L | | 96 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 37.9 | | ng/L | | 98 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 36.9 | | ng/L | | 95 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 38.8 | | ng/L | | 97 | 60 - 135 |
| NMeFOSA | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| NEtFOSA | 40.0 | 38.4 | | ng/L | | 96 | 60 - 135 |
| NMeFOSAA | 40.0 | 48.7 | | ng/L | | 122 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| NMeFOSE | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| NEtFOSE | 40.0 | 33.1 | | ng/L | | 83 | 60 - 135 |
| 4:2 FTS | 37.4 | 35.8 | | ng/L | | 96 | 60 - 135 |
| 6:2 FTS | 37.9 | 38.8 | | ng/L | | 102 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.4 | | ng/L | | 105 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.4 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| F-53B Major | 37.3 | 38.7 | | ng/L | | 104 | 60 - 135 |
| F-53B Minor | 37.7 | 37.7 | | ng/L | | 100 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 39.3 | | ng/L | | 104 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *113* | | *25 - 150* |
| *13C5 PFPeA* | *106* | | *25 - 150* |
| *13C2 PFHxA* | *105* | | *25 - 150* |
| *13C4 PFHpA* | *110* | | *25 - 150* |
| *13C4 PFOA* | *111* | | *25 - 150* |
| *13C5 PFNA* | *119* | | *25 - 150* |
| *13C2 PFDA* | *112* | | *25 - 150* |
| *13C2 PFUnA* | *112* | | *25 - 150* |
| *13C2 PFDoA* | *109* | | *25 - 150* |
| *13C2 PFTeDA* | *110* | | *25 - 150* |
| *13C2 PFHxDA* | *117* | | *25 - 150* |
| *13C3 PFBS* | *101* | | *25 - 150* |
| *18O2 PFHxS* | *113* | | *25 - 150* |
| *13C4 PFOS* | *110* | | *25 - 150* |
| *13C8 FOSA* | *110* | | *10 - 150* |
| *M2-4:2 FTS* | *117* | | *25 - 150* |
| *M2-6:2 FTS* | *137* | | *25 - 150* |
| *M2-8:2 FTS* | *136* | | *25 - 150* |
| *13C2 10:2 FTS* | *133* | | *25 - 150* |
| *13C3 HFPO-DA* | *104* | | *25 - 150* |
| *d3-NMeFOSAA* | *102* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-486416/2-A**
**Matrix: Water**
**Analysis Batch: 487484**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *110* | | *25 - 150* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* |
| *d-N-EtFOSA-M* | *94* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *105* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *111* | | *10 - 150* |

**Lab Sample ID: 320-73172-4 MS**
**Matrix: Water**
**Analysis Batch: 487929**

**Client Sample ID: PWS-MS01-042921**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.9 | | 38.0 | 41.3 | | ng/L | | 93 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | ND | | 38.0 | 39.2 | | ng/L | | 103 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | ND | | 38.0 | 41.9 | | ng/L | | 110 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 38.0 | 41.5 | | ng/L | | 109 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 38.0 | 43.0 | | ng/L | | 110 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 38.0 | 38.0 | | ng/L | | 100 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 38.0 | 39.6 | | ng/L | | 104 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 38.0 | 38.4 | | ng/L | | 101 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 38.0 | 37.3 | | ng/L | | 98 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 38.0 | 32.8 | | ng/L | | 86 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 38.0 | 41.9 | | ng/L | | 110 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 38.0 | 38.8 | | ng/L | | 102 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 38.0 | 42.4 | | ng/L | | 111 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J I | 33.6 | 33.7 | | ng/L | | 97 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 35.6 | 37.8 | | ng/L | | 106 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 0.63 | J | 34.6 | 31.1 | | ng/L | | 88 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 36.2 | 37.0 | | ng/L | | 102 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 4.2 | | 35.3 | 40.8 | | ng/L | | 104 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 36.5 | 36.6 | | ng/L | | 100 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 36.6 | 38.8 | | ng/L | | 106 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.8 | 35.2 | | ng/L | | 96 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 38.0 | 40.4 | | ng/L | | 106 | 70 - 130 |
| NMeFOSA | ND | | 38.0 | 43.8 | | ng/L | | 115 | 70 - 130 |
| NEtFOSA | ND | | 38.0 | 38.4 | | ng/L | | 101 | 70 - 130 |
| NMeFOSAA | ND | | 38.0 | 39.9 | | ng/L | | 105 | 70 - 130 |
| NEtFOSAA | ND | | 38.0 | 32.2 | | ng/L | | 85 | 70 - 130 |
| NMeFOSE | ND | | 38.0 | 34.6 | | ng/L | | 91 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-4 MS**
**Matrix: Water**
**Analysis Batch: 487929**

**Client Sample ID: PWS-MS01-042921**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 38.0 | 35.0 | | ng/L | | 92 | 70 - 130 |
| 4:2 FTS | ND | | 35.5 | 34.9 | | ng/L | | 98 | 70 - 130 |
| 6:2 FTS | ND | | 36.0 | 39.1 | | ng/L | | 109 | 70 - 130 |
| 8:2 FTS | ND | | 36.4 | 37.8 | | ng/L | | 104 | 70 - 130 |
| 10:2 FTS | ND | | 36.6 | 35.2 | | ng/L | | 96 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 38.0 | 39.6 | | ng/L | | 104 | 70 - 130 |
| F-53B Major | ND | | 35.4 | 37.2 | | ng/L | | 105 | 70 - 130 |
| F-53B Minor | ND | | 35.8 | 36.0 | | ng/L | | 101 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.8 | 37.8 | | ng/L | | 106 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* |
| *13C5 PFPeA* | *80* | | *25 - 150* |
| *13C2 PFHxA* | *97* | | *25 - 150* |
| *13C4 PFHpA* | *98* | | *25 - 150* |
| *13C4 PFOA* | *100* | | *25 - 150* |
| *13C5 PFNA* | *109* | | *25 - 150* |
| *13C2 PFDA* | *107* | | *25 - 150* |
| *13C2 PFUnA* | *108* | | *25 - 150* |
| *13C2 PFDoA* | *116* | | *25 - 150* |
| *13C2 PFTeDA* | *103* | | *25 - 150* |
| *13C2 PFHxDA* | *117* | | *25 - 150* |
| *13C3 PFBS* | *77* | | *25 - 150* |
| *18O2 PFHxS* | *90* | | *25 - 150* |
| *13C4 PFOS* | *92* | | *25 - 150* |
| *13C8 FOSA* | *100* | | *10 - 150* |
| *M2-4:2 FTS* | *117* | | *25 - 150* |
| *M2-6:2 FTS* | *133* | | *25 - 150* |
| *M2-8:2 FTS* | *132* | | *25 - 150* |
| *13C2 10:2 FTS* | *129* | | *25 - 150* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* |
| *d3-NMeFOSAA* | *108* | | *25 - 150* |
| *d5-NEtFOSAA* | *127* | | *25 - 150* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *108* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* |

**Lab Sample ID: 320-73172-4 MSD**
**Matrix: Water**
**Analysis Batch: 487929**

**Client Sample ID: PWS-MSD01-042921**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.9 | | 37.2 | 39.9 | | ng/L | | 91 | 70 - 130 | 4 | 30 |
| Perfluoropentanoic acid (PFPeA) | ND | | 37.2 | 35.8 | | ng/L | | 96 | 70 - 130 | 9 | 30 |
| Perfluorohexanoic acid (PFHxA) | ND | | 37.2 | 37.1 | | ng/L | | 100 | 70 - 130 | 12 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 37.2 | 40.9 | | ng/L | | 110 | 70 - 130 | 2 | 30 |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 37.2 | 39.8 | | ng/L | | 103 | 70 - 130 | 8 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-4 MSD**
**Matrix: Water**
**Analysis Batch: 487929**

**Client Sample ID: PWS-MSD01-042921**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 37.2 | 38.6 | | ng/L | | 104 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 37.2 | 35.9 | | ng/L | | 96 | 70 - 130 | 10 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 37.2 | 33.3 | | ng/L | | 89 | 70 - 130 | 14 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 37.2 | 36.3 | | ng/L | | 98 | 70 - 130 | 3 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 37.2 | 35.4 | | ng/L | | 95 | 70 - 130 | 8 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 37.2 | 37.8 | | ng/L | | 102 | 70 - 130 | 10 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 37.2 | 39.3 | | ng/L | | 106 | 70 - 130 | 1 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 37.2 | 38.7 | | ng/L | | 104 | 70 - 130 | 9 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 1.1 | J I | 32.9 | 34.2 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 34.9 | 36.5 | | ng/L | | 104 | 70 - 130 | 4 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 0.63 | J | 33.9 | 30.1 | | ng/L | | 87 | 70 - 130 | 3 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 35.4 | 39.7 | | ng/L | | 112 | 70 - 130 | 7 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 4.2 | | 34.5 | 43.6 | | ng/L | | 114 | 70 - 130 | 7 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.7 | 36.3 | | ng/L | | 102 | 70 - 130 | 1 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.9 | 42.0 | | ng/L | | 117 | 70 - 130 | 8 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 36.0 | 41.6 | | ng/L | | 116 | 70 - 130 | 17 | 30 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 37.2 | 37.3 | | ng/L | | 100 | 70 - 130 | 8 | 30 |
| NMeFOSA | ND | | 37.2 | 43.4 | | ng/L | | 117 | 70 - 130 | 1 | 30 |
| NEtFOSA | ND | | 37.2 | 38.5 | | ng/L | | 103 | 70 - 130 | 0 | 30 |
| NMeFOSAA | ND | | 37.2 | 36.8 | | ng/L | | 99 | 70 - 130 | 8 | 30 |
| NEtFOSAA | ND | | 37.2 | 35.6 | | ng/L | | 96 | 70 - 130 | 10 | 30 |
| NMeFOSE | ND | | 37.2 | 36.1 | | ng/L | | 97 | 70 - 130 | 4 | 30 |
| NEtFOSE | ND | | 37.2 | 33.4 | | ng/L | | 90 | 70 - 130 | 5 | 30 |
| 4:2 FTS | ND | | 34.8 | 36.1 | | ng/L | | 104 | 70 - 130 | 3 | 30 |
| 6:2 FTS | ND | | 35.3 | 34.9 | | ng/L | | 99 | 70 - 130 | 12 | 30 |
| 8:2 FTS | ND | | 35.7 | 38.6 | | ng/L | | 108 | 70 - 130 | 2 | 30 |
| 10:2 FTS | ND | | 35.9 | 31.4 | | ng/L | | 88 | 70 - 130 | 11 | 30 |
| HFPO-DA (GenX) | ND | | 37.2 | 43.6 | | ng/L | | 117 | 70 - 130 | 10 | 30 |
| F-53B Major | ND | | 34.7 | 39.5 | | ng/L | | 114 | 70 - 130 | 6 | 30 |
| F-53B Minor | ND | | 35.1 | 36.8 | | ng/L | | 105 | 70 - 130 | 2 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 35.1 | 37.9 | | ng/L | | 108 | 70 - 130 | 0 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *74* | | *25 - 150* |
| *13C5 PFPeA* | *75* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *97* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-4 MSD**
**Matrix: Water**
**Analysis Batch: 487929**

**Client Sample ID: PWS-MSD01-042921**
**Prep Type: Total/NA**
**Prep Batch: 486416**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C4 PFOA | 112 | | 25 - 150 |
| 13C5 PFNA | 114 | | 25 - 150 |
| 13C2 PFDA | 107 | | 25 - 150 |
| 13C2 PFUnA | 126 | | 25 - 150 |
| 13C2 PFDoA | 114 | | 25 - 150 |
| 13C2 PFTeDA | 107 | | 25 - 150 |
| 13C2 PFHxDA | 117 | | 25 - 150 |
| 13C3 PFBS | 76 | | 25 - 150 |
| 18O2 PFHxS | 92 | | 25 - 150 |
| 13C4 PFOS | 92 | | 25 - 150 |
| 13C8 FOSA | 101 | | 10 - 150 |
| M2-4:2 FTS | 113 | | 25 - 150 |
| M2-6:2 FTS | 135 | | 25 - 150 |
| M2-8:2 FTS | 122 | | 25 - 150 |
| 13C2 10:2 FTS | 130 | | 25 - 150 |
| 13C3 HFPO-DA | 87 | | 25 - 150 |
| d3-NMeFOSAA | 101 | | 25 - 150 |
| d5-NEtFOSAA | 116 | | 25 - 150 |
| d-N-MeFOSA-M | 83 | | 10 - 150 |
| d-N-EtFOSA-M | 87 | | 10 - 150 |
| d7-N-MeFOSE-M | 98 | | 10 - 150 |
| d9-N-EtFOSE-M | 111 | | 10 - 150 |

**Lab Sample ID: MB 320-486417/1-A**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-486417/1-A**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/06/21 04:36 | 05/11/21 01:42 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C5 PFPeA* | *111* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFHxA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C4 PFHpA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C4 PFOA* | *115* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C5 PFNA* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFDA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFUnA* | *129* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFDoA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFTeDA* | *118* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 PFHxDA* | *116* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C3 PFBS* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *18O2 PFHxS* | *108* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C4 PFOS* | *121* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C8 FOSA* | *116* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *M2-4:2 FTS* | *132* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *M2-6:2 FTS* | *127* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *M2-8:2 FTS* | *137* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C2 10:2 FTS* | *136* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *13C3 HFPO-DA* | *117* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d3-NMeFOSAA* | *114* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d5-NEtFOSAA* | *125* | | *25 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d-N-MeFOSA-M* | *94* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d-N-EtFOSA-M* | *109* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d7-N-MeFOSE-M* | *111* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |
| *d9-N-EtFOSE-M* | *113* | | *10 - 150* | *05/06/21 04:36* | *05/11/21 01:42* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-486417/2-A**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 38.8 | | ng/L | | 97 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 35.9 | | ng/L | | 90 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 39.0 | | ng/L | | 98 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 40.2 | | ng/L | | 101 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 37.6 | | ng/L | | 94 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 36.2 | | ng/L | | 102 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.3 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.5 | | ng/L | | 95 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 39.7 | | ng/L | | 104 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.2 | | ng/L | | 103 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 36.5 | | ng/L | | 95 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 37.6 | | ng/L | | 98 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 36.6 | | ng/L | | 94 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 |
| NMeFOSA | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| NEtFOSA | 40.0 | 38.3 | | ng/L | | 96 | 60 - 135 |
| NMeFOSAA | 40.0 | 47.1 | | ng/L | | 118 | 60 - 135 |
| NEtFOSAA | 40.0 | 38.1 | | ng/L | | 95 | 60 - 135 |
| NMeFOSE | 40.0 | 41.0 | | ng/L | | 102 | 60 - 135 |
| NEtFOSE | 40.0 | 36.4 | | ng/L | | 91 | 60 - 135 |
| 4:2 FTS | 37.4 | 40.4 | | ng/L | | 108 | 60 - 135 |
| 6:2 FTS | 37.9 | 39.1 | | ng/L | | 103 | 60 - 135 |
| 8:2 FTS | 38.3 | 39.0 | | ng/L | | 102 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.0 | | ng/L | | 93 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 47.6 | | ng/L | | 119 | 60 - 135 |
| F-53B Major | 37.3 | 37.9 | | ng/L | | 102 | 60 - 135 |
| F-53B Minor | 37.7 | 37.9 | | ng/L | | 101 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 37.9 | | ng/L | | 101 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 114 | | 25 - 150 |
| 13C5 PFPeA | 113 | | 25 - 150 |
| 13C2 PFHxA | 115 | | 25 - 150 |
| 13C4 PFHpA | 119 | | 25 - 150 |
| 13C4 PFOA | 115 | | 25 - 150 |
| 13C5 PFNA | 128 | | 25 - 150 |
| 13C2 PFDA | 114 | | 25 - 150 |
| 13C2 PFUnA | 120 | | 25 - 150 |
| 13C2 PFDoA | 116 | | 25 - 150 |
| 13C2 PFTeDA | 118 | | 25 - 150 |
| 13C2 PFHxDA | 122 | | 25 - 150 |
| 13C3 PFBS | 107 | | 25 - 150 |
| 18O2 PFHxS | 118 | | 25 - 150 |
| 13C4 PFOS | 119 | | 25 - 150 |
| 13C8 FOSA | 115 | | 10 - 150 |
| M2-4:2 FTS | 113 | | 25 - 150 |
| M2-6:2 FTS | 129 | | 25 - 150 |
| M2-8:2 FTS | 138 | | 25 - 150 |
| 13C2 10:2 FTS | 126 | | 25 - 150 |
| 13C3 HFPO-DA | 105 | | 25 - 150 |
| d3-NMeFOSAA | 104 | | 25 - 150 |
| d5-NEtFOSAA | 125 | | 25 - 150 |
| d-N-MeFOSA-M | 92 | | 10 - 150 |
| d-N-EtFOSA-M | 97 | | 10 - 150 |
| d7-N-MeFOSE-M | 103 | | 10 - 150 |
| d9-N-EtFOSE-M | 112 | | 10 - 150 |

**Lab Sample ID: 320-73172-51 MS**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: PWS-MS02-043021**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 36.8 | 36.8 | | ng/L | | 93 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 0.94 | J | 36.8 | 36.4 | | ng/L | | 96 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 2.2 | | 36.8 | 40.6 | | ng/L | | 104 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 36.8 | 37.1 | | ng/L | | 101 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | ND | | 36.8 | 40.9 | | ng/L | | 111 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 36.8 | 36.1 | | ng/L | | 98 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.8 | 36.3 | | ng/L | | 99 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.8 | 38.3 | | ng/L | | 104 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.8 | 34.0 | | ng/L | | 93 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.8 | 33.7 | | ng/L | | 92 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.8 | 36.3 | | ng/L | | 99 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.8 | 38.4 | | ng/L | | 104 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.8 | 39.1 | | ng/L | | 106 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 4.5 | | 32.5 | 35.0 | | ng/L | | 94 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-51 MS**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: PWS-MS02-043021**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | 2.2 | | 34.5 | 35.8 | | ng/L | | 97 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 8.8 | | 33.4 | 38.8 | | ng/L | | 90 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 35.0 | 36.9 | | ng/L | | 105 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 34.1 | 36.3 | | ng/L | | 106 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.3 | 33.1 | | ng/L | | 94 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.4 | 32.6 | | ng/L | | 92 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.6 | 35.7 | | ng/L | | 100 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 36.8 | 39.3 | | ng/L | | 103 | 70 - 130 |
| NMeFOSA | ND | | 36.8 | 35.8 | | ng/L | | 97 | 70 - 130 |
| NEtFOSA | ND | | 36.8 | 34.0 | | ng/L | | 92 | 70 - 130 |
| NMeFOSAA | ND | | 36.8 | 35.5 | | ng/L | | 97 | 70 - 130 |
| NEtFOSAA | ND | | 36.8 | 39.0 | | ng/L | | 106 | 70 - 130 |
| NMeFOSE | ND | | 36.8 | 32.8 | | ng/L | | 89 | 70 - 130 |
| NEtFOSE | ND | | 36.8 | 35.1 | | ng/L | | 95 | 70 - 130 |
| 4:2 FTS | ND | | 34.3 | 32.3 | | ng/L | | 94 | 70 - 130 |
| 6:2 FTS | ND | | 34.8 | 36.0 | | ng/L | | 103 | 70 - 130 |
| 8:2 FTS | ND | | 35.2 | 36.8 | | ng/L | | 104 | 70 - 130 |
| 10:2 FTS | ND | | 35.4 | 31.6 | | ng/L | | 89 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 36.8 | 33.8 | | ng/L | | 92 | 70 - 130 |
| F-53B Major | ND | | 34.3 | 34.3 | | ng/L | | 100 | 70 - 130 |
| F-53B Minor | ND | | 34.6 | 32.3 | | ng/L | | 93 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.6 | 31.9 | | ng/L | | 92 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *110* | | *25 - 150* |
| *13C5 PFPeA* | *104* | | *25 - 150* |
| *13C2 PFHxA* | *105* | | *25 - 150* |
| *13C4 PFHpA* | *110* | | *25 - 150* |
| *13C4 PFOA* | *106* | | *25 - 150* |
| *13C5 PFNA* | *115* | | *25 - 150* |
| *13C2 PFDA* | *108* | | *25 - 150* |
| *13C2 PFUnA* | *113* | | *25 - 150* |
| *13C2 PFDoA* | *116* | | *25 - 150* |
| *13C2 PFTeDA* | *118* | | *25 - 150* |
| *13C2 PFHxDA* | *116* | | *25 - 150* |
| *13C3 PFBS* | *108* | | *25 - 150* |
| *18O2 PFHxS* | *110* | | *25 - 150* |
| *13C4 PFOS* | *112* | | *25 - 150* |
| *13C8 FOSA* | *110* | | *10 - 150* |
| *M2-4:2 FTS* | *110* | | *25 - 150* |
| *M2-6:2 FTS* | *124* | | *25 - 150* |
| *M2-8:2 FTS* | *124* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-51 MS**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: PWS-MS02-043021**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 121 | | 25 - 150 |
| 13C3 HFPO-DA | 109 | | 25 - 150 |
| d3-NMeFOSAA | 108 | | 25 - 150 |
| d5-NEtFOSAA | 108 | | 25 - 150 |
| d-N-MeFOSA-M | 97 | | 10 - 150 |
| d-N-EtFOSA-M | 90 | | 10 - 150 |
| d7-N-MeFOSE-M | 110 | | 10 - 150 |
| d9-N-EtFOSE-M | 105 | | 10 - 150 |

**Lab Sample ID: 320-73172-51 MSD**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: PWS-MSD02-043021**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.8 | J | 36.4 | 37.6 | | ng/L | | 96 | 70 - 130 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | 0.94 | J | 36.4 | 36.4 | | ng/L | | 97 | 70 - 130 | 0 | 30 |
| Perfluorohexanoic acid (PFHxA) | 2.2 | | 36.4 | 36.3 | | ng/L | | 94 | 70 - 130 | 11 | 30 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 36.4 | 35.8 | | ng/L | | 98 | 70 - 130 | 4 | 30 |
| Perfluorooctanoic acid (PFOA) | ND | | 36.4 | 39.5 | | ng/L | | 108 | 70 - 130 | 3 | 30 |
| Perfluorononanoic acid (PFNA) | ND | | 36.4 | 37.0 | | ng/L | | 102 | 70 - 130 | 2 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 36.4 | 34.8 | | ng/L | | 96 | 70 - 130 | 4 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 36.4 | 36.9 | | ng/L | | 101 | 70 - 130 | 4 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 36.4 | 36.0 | | ng/L | | 99 | 70 - 130 | 6 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 36.4 | 37.8 | | ng/L | | 104 | 70 - 130 | 11 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 36.4 | 35.4 | | ng/L | | 97 | 70 - 130 | 3 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 36.4 | 38.8 | | ng/L | | 106 | 70 - 130 | 1 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 36.4 | 41.1 | | ng/L | | 113 | 70 - 130 | 5 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 4.5 | | 32.2 | 36.6 | | ng/L | | 100 | 70 - 130 | 4 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | 2.2 | | 34.2 | 36.8 | | ng/L | | 101 | 70 - 130 | 3 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 8.8 | | 33.1 | 40.2 | | ng/L | | 95 | 70 - 130 | 4 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 34.7 | 35.4 | | ng/L | | 102 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 33.8 | 36.9 | | ng/L | | 109 | 70 - 130 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 35.0 | 32.9 | | ng/L | | 94 | 70 - 130 | 0 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 35.1 | 35.9 | | ng/L | | 102 | 70 - 130 | 10 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 35.3 | 37.0 | | ng/L | | 105 | 70 - 130 | 4 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 36.4 | 40.1 | | ng/L | | 106 | 70 - 130 | 2 | 30 |
| NMeFOSA | ND | | 36.4 | 38.5 | | ng/L | | 106 | 70 - 130 | 7 | 30 |
| NEtFOSA | ND | | 36.4 | 35.1 | | ng/L | | 96 | 70 - 130 | 3 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73172-51 MSD**
**Matrix: Water**
**Analysis Batch: 487766**

**Client Sample ID: PWS-MSD02-043021**
**Prep Type: Total/NA**
**Prep Batch: 486417**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NMeFOSAA | ND | | 36.4 | 43.1 | | ng/L | | 118 | 70 - 130 | 19 | 30 |
| NEtFOSAA | ND | | 36.4 | 37.2 | | ng/L | | 102 | 70 - 130 | 5 | 30 |
| NMeFOSE | ND | | 36.4 | 35.3 | | ng/L | | 97 | 70 - 130 | 7 | 30 |
| NEtFOSE | ND | | 36.4 | 34.8 | | ng/L | | 96 | 70 - 130 | 1 | 30 |
| 4:2 FTS | ND | | 34.0 | 36.5 | | ng/L | | 107 | 70 - 130 | 12 | 30 |
| 6:2 FTS | ND | | 34.5 | 41.6 | | ng/L | | 121 | 70 - 130 | 15 | 30 |
| 8:2 FTS | ND | | 34.9 | 38.8 | | ng/L | | 111 | 70 - 130 | 5 | 30 |
| 10:2 FTS | ND | | 35.1 | 33.4 | | ng/L | | 95 | 70 - 130 | 5 | 30 |
| HFPO-DA (GenX) | ND | | 36.4 | 40.5 | | ng/L | | 111 | 70 - 130 | 18 | 30 |
| F-53B Major | ND | | 33.9 | 35.5 | | ng/L | | 105 | 70 - 130 | 4 | 30 |
| F-53B Minor | ND | | 34.3 | 31.6 | | ng/L | | 92 | 70 - 130 | 2 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 34.3 | 34.2 | | ng/L | | 100 | 70 - 130 | 7 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *118* | | *25 - 150* |
| *13C5 PFPeA* | *107* | | *25 - 150* |
| *13C2 PFHxA* | *112* | | *25 - 150* |
| *13C4 PFHpA* | *117* | | *25 - 150* |
| *13C4 PFOA* | *114* | | *25 - 150* |
| *13C5 PFNA* | *123* | | *25 - 150* |
| *13C2 PFDA* | *114* | | *25 - 150* |
| *13C2 PFUnA* | *119* | | *25 - 150* |
| *13C2 PFDoA* | *115* | | *25 - 150* |
| *13C2 PFTeDA* | *118* | | *25 - 150* |
| *13C2 PFHxDA* | *114* | | *25 - 150* |
| *13C3 PFBS* | *106* | | *25 - 150* |
| *18O2 PFHxS* | *116* | | *25 - 150* |
| *13C4 PFOS* | *116* | | *25 - 150* |
| *13C8 FOSA* | *117* | | *10 - 150* |
| *M2-4:2 FTS* | *98* | | *25 - 150* |
| *M2-6:2 FTS* | *116* | | *25 - 150* |
| *M2-8:2 FTS* | *118* | | *25 - 150* |
| *13C2 10:2 FTS* | *126* | | *25 - 150* |
| *13C3 HFPO-DA* | *106* | | *25 - 150* |
| *d3-NMeFOSAA* | *106* | | *25 - 150* |
| *d5-NEtFOSAA* | *124* | | *25 - 150* |
| *d-N-MeFOSA-M* | *93* | | *10 - 150* |
| *d-N-EtFOSA-M* | *96* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *114* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *104* | | *10 - 150* |

**Lab Sample ID: MB 320-486679/1-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-486679/1-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/06/21 12:56 | 05/08/21 13:01 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *67* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C5 PFPeA* | *68* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C2 PFHxA* | *61* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C4 PFHpA* | *67* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C4 PFOA* | *70* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C5 PFNA* | *72* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C2 PFDA* | *69* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |
| *13C2 PFUnA* | *72* | | *25 - 150* | *05/06/21 12:56* | *05/08/21 13:01* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-486679/1-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 76 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C2 PFTeDA | 64 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C2 PFHxDA | 69 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 18O2 PFHxS | 79 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C8 FOSA | 82 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| M2-4:2 FTS | 82 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| M2-6:2 FTS | 81 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| M2-8:2 FTS | 90 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C2 10:2 FTS | 89 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| 13C3 HFPO-DA | 59 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d3-NMeFOSAA | 79 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d5-NEtFOSAA | 82 | | 25 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d-N-MeFOSA-M | 50 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d-N-EtFOSA-M | 52 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d7-N-MeFOSE-M | 67 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |
| d9-N-EtFOSE-M | 62 | | 10 - 150 | 05/06/21 12:56 | 05/08/21 13:01 | 1 |

**Lab Sample ID: LCS 320-486679/2-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 37.6 | | ng/L | | 94 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 42.2 | | ng/L | | 105 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 37.1 | | ng/L | | 93 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 37.5 | | ng/L | | 94 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 39.6 | | ng/L | | 99 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 34.9 | | ng/L | | 99 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 42.5 | | ng/L | | 113 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.5 | | ng/L | | 95 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 37.8 | | ng/L | | 99 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-486679/2-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.8 | | ng/L | | 99 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 36.3 | | ng/L | | 95 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 36.0 | | ng/L | | 93 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.9 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 38.7 | | ng/L | | 97 | 60 - 135 |
| NMeFOSA | 40.0 | 43.9 | | ng/L | | 110 | 60 - 135 |
| NEtFOSA | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| NMeFOSAA | 40.0 | 49.0 | | ng/L | | 122 | 60 - 135 |
| NEtFOSAA | 40.0 | 37.7 | | ng/L | | 94 | 60 - 135 |
| NMeFOSE | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| NEtFOSE | 40.0 | 37.1 | | ng/L | | 93 | 60 - 135 |
| 4:2 FTS | 37.4 | 34.1 | | ng/L | | 91 | 60 - 135 |
| 6:2 FTS | 37.9 | 32.9 | | ng/L | | 87 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.5 | | ng/L | | 106 | 60 - 135 |
| 10:2 FTS | 38.6 | 35.9 | | ng/L | | 93 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 43.4 | | ng/L | | 109 | 60 - 135 |
| F-53B Major | 37.3 | 36.9 | | ng/L | | 99 | 60 - 135 |
| F-53B Minor | 37.7 | 36.3 | | ng/L | | 96 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 32.3 | | ng/L | | 86 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* |
| *13C5 PFPeA* | *75* | | *25 - 150* |
| *13C2 PFHxA* | *74* | | *25 - 150* |
| *13C4 PFHpA* | *82* | | *25 - 150* |
| *13C4 PFOA* | *78* | | *25 - 150* |
| *13C5 PFNA* | *81* | | *25 - 150* |
| *13C2 PFDA* | *78* | | *25 - 150* |
| *13C2 PFUnA* | *87* | | *25 - 150* |
| *13C2 PFDoA* | *82* | | *25 - 150* |
| *13C2 PFTeDA* | *81* | | *25 - 150* |
| *13C2 PFHxDA* | *85* | | *25 - 150* |
| *13C3 PFBS* | *86* | | *25 - 150* |
| *18O2 PFHxS* | *90* | | *25 - 150* |
| *13C4 PFOS* | *89* | | *25 - 150* |
| *13C8 FOSA* | *91* | | *10 - 150* |
| *M2-4:2 FTS* | *94* | | *25 - 150* |
| *M2-6:2 FTS* | *105* | | *25 - 150* |
| *M2-8:2 FTS* | *99* | | *25 - 150* |
| *13C2 10:2 FTS* | *99* | | *25 - 150* |
| *13C3 HFPO-DA* | *70* | | *25 - 150* |
| *d3-NMeFOSAA* | *82* | | *25 - 150* |
| *d5-NEtFOSAA* | *87* | | *25 - 150* |
| *d-N-MeFOSA-M* | *62* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-486679/2-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| d-N-EtFOSA-M | 63 | | 10 - 150 |
| d7-N-MeFOSE-M | 75 | | 10 - 150 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 |

**Lab Sample ID: LCSD 320-486679/3-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 38.6 | | ng/L | | 96 | 60 - 135 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 | 2 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 | 2 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 | 5 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 | 3 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 6 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 33.4 | | ng/L | | 84 | 60 - 135 | 12 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 | 5 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 6 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 38.3 | | ng/L | | 96 | 60 - 135 | 5 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 39.0 | | ng/L | | 98 | 60 - 135 | 5 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 | 1 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 34.5 | | ng/L | | 97 | 60 - 135 | 1 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 42.2 | | ng/L | | 112 | 60 - 135 | 1 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 32.7 | | ng/L | | 90 | 60 - 135 | 5 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 39.9 | | ng/L | | 105 | 60 - 135 | 5 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 37.6 | | ng/L | | 101 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 35.9 | | ng/L | | 94 | 60 - 135 | 1 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 37.9 | | ng/L | | 98 | 60 - 135 | 5 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 43.2 | | ng/L | | 112 | 60 - 135 | 6 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 | 3 | 30 |
| NMeFOSA | | | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 | 1 | 30 |
| NEtFOSA | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 6 | 30 |
| NMeFOSAA | | | 40.0 | 45.9 | | ng/L | | 115 | 60 - 135 | 7 | 30 |
| NEtFOSAA | | | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 | 3 | 30 |
| NMeFOSE | | | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 | 1 | 30 |
| NEtFOSE | | | 40.0 | 37.2 | | ng/L | | 93 | 60 - 135 | 0 | 30 |
| 4:2 FTS | | | 37.4 | 33.4 | | ng/L | | 89 | 60 - 135 | 2 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-486679/3-A**
**Matrix: Water**
**Analysis Batch: 487291**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 486679**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:2 FTS | | | 37.9 | 36.5 | | ng/L | | 96 | 60 - 135 | 10 | 30 |
| 8:2 FTS | | | 38.3 | 42.3 | | ng/L | | 110 | 60 - 135 | 4 | 30 |
| 10:2 FTS | | | 38.6 | 36.3 | | ng/L | | 94 | 60 - 135 | 1 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 | 4 | 30 |
| F-53B Major | | | 37.3 | 36.9 | | ng/L | | 99 | 60 - 135 | 0 | 30 |
| F-53B Minor | | | 37.7 | 34.7 | | ng/L | | 92 | 60 - 135 | 5 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 32.8 | | ng/L | | 87 | 60 - 135 | 2 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *67* | | *25 - 150* |
| *13C5 PFPeA* | *70* | | *25 - 150* |
| *13C2 PFHxA* | *67* | | *25 - 150* |
| *13C4 PFHpA* | *70* | | *25 - 150* |
| *13C4 PFOA* | *72* | | *25 - 150* |
| *13C5 PFNA* | *73* | | *25 - 150* |
| *13C2 PFDA* | *69* | | *25 - 150* |
| *13C2 PFUnA* | *80* | | *25 - 150* |
| *13C2 PFDoA* | *73* | | *25 - 150* |
| *13C2 PFTeDA* | *81* | | *25 - 150* |
| *13C2 PFHxDA* | *80* | | *25 - 150* |
| *13C3 PFBS* | *77* | | *25 - 150* |
| *18O2 PFHxS* | *86* | | *25 - 150* |
| *13C4 PFOS* | *81* | | *25 - 150* |
| *13C8 FOSA* | *81* | | *10 - 150* |
| *M2-4:2 FTS* | *96* | | *25 - 150* |
| *M2-6:2 FTS* | *93* | | *25 - 150* |
| *M2-8:2 FTS* | *90* | | *25 - 150* |
| *13C2 10:2 FTS* | *93* | | *25 - 150* |
| *13C3 HFPO-DA* | *63* | | *25 - 150* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* |
| *d5-NEtFOSAA* | *77* | | *25 - 150* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* |
| *d-N-EtFOSA-M* | *62* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *71* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* |

## LCMS

### Prep Batch: 486416

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-1 | PWS1180-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-3 | PWS-FD01-042921 | Total/NA | Water | 3535 | |
| 320-73172-4 | PWS1013-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-6 | PWS1012-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-8 | PWS1076-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-10 | PWS1191-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-12 | PWS1147-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-14 | PWS-FD02-042921 | Total/NA | Water | 3535 | |
| 320-73172-15 | PWS1089-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-17 | PWS1101-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-19 | PWS1092-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-21 | PWS1125-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-23 | PWS1155-OS-042921-100 | Total/NA | Water | 3535 | |
| MB 320-486416/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-486416/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73172-4 MS | PWS-MS01-042921 | Total/NA | Water | 3535 | |
| 320-73172-4 MSD | PWS-MSD01-042921 | Total/NA | Water | 3535 | |

### Prep Batch: 486417

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-25 | PWS1127-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-27 | PWS1106-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-29 | PWS1161-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-31 | PWS1114-OS-042921-100 | Total/NA | Water | 3535 | |
| 320-73172-33 | PWS1070-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-35 | PWS1073-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-37 | PWS1174-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-39 | PWS1019-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-41 | PWS1044-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-43 | PWS1034-IS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-45 | PWS1036-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-47 | PWS1023-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-49 | PWS1088-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-51 | PWS1103-OS-043021-100 | Total/NA | Water | 3535 | |
| MB 320-486417/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-486417/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73172-51 MS | PWS-MS02-043021 | Total/NA | Water | 3535 | |
| 320-73172-51 MSD | PWS-MSD02-043021 | Total/NA | Water | 3535 | |

### Prep Batch: 486679

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-53 | PWS1134-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-55 | PWS-FD02-043021 | Total/NA | Water | 3535 | |
| 320-73172-56 | PWS1135-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-58 | PWS1136-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-60 | PWS1195-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-62 | PWS1189-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-64 | PWS1110-IS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-66 | PWS1063-OS-043021-100 | Total/NA | Water | 3535 | |
| 320-73172-68 | PWS1160-OS-043021-100 | Total/NA | Water | 3535 | |
| MB 320-486679/1-A | Method Blank | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 486679 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 320-486679/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-486679/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 487291

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-53 | PWS1134-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-55 | PWS-FD02-043021 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-56 | PWS1135-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-58 | PWS1136-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-60 | PWS1195-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-62 | PWS1189-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-64 | PWS1110-IS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-66 | PWS1063-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| 320-73172-68 | PWS1160-OS-043021-100 | Total/NA | Water | 537 (modified) | 486679 |
| MB 320-486679/1-A | Method Blank | Total/NA | Water | 537 (modified) | 486679 |
| LCS 320-486679/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 486679 |
| LCSD 320-486679/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 486679 |

### Analysis Batch: 487484

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-1 | PWS1180-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-3 | PWS-FD01-042921 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-8 | PWS1076-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-10 | PWS1191-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-12 | PWS1147-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-14 | PWS-FD02-042921 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-15 | PWS1089-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-17 | PWS1101-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-19 | PWS1092-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-21 | PWS1125-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-23 | PWS1155-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| MB 320-486416/1-A | Method Blank | Total/NA | Water | 537 (modified) | 486416 |
| LCS 320-486416/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 486416 |

### Analysis Batch: 487766

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-25 | PWS1127-OS-042921-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-29 | PWS1161-OS-042921-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-31 | PWS1114-OS-042921-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-33 | PWS1070-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-35 | PWS1073-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-37 | PWS1174-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-39 | PWS1019-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-41 | PWS1044-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-43 | PWS1034-IS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-45 | PWS1036-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-47 | PWS1023-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-49 | PWS1088-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-51 | PWS1103-OS-043021-100 | Total/NA | Water | 537 (modified) | 486417 |
| MB 320-486417/1-A | Method Blank | Total/NA | Water | 537 (modified) | 486417 |
| LCS 320-486417/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 486417 |

## LCMS (Continued)

### Analysis Batch: 487766 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-51 MS | PWS-MS02-043021 | Total/NA | Water | 537 (modified) | 486417 |
| 320-73172-51 MSD | PWS-MSD02-043021 | Total/NA | Water | 537 (modified) | 486417 |

### Analysis Batch: 487929

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-4 | PWS1013-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-6 | PWS1012-OS-042921-100 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-4 MS | PWS-MS01-042921 | Total/NA | Water | 537 (modified) | 486416 |
| 320-73172-4 MSD | PWS-MSD01-042921 | Total/NA | Water | 537 (modified) | 486416 |

### Analysis Batch: 488306

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73172-27 | PWS1106-OS-042921-100 | Total/NA | Water | 537 (modified) | 486417 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

## Client Sample ID: PWS1180-OS-042921-100
**Lab Sample ID: 320-73172-1**
**Date Collected: 04/29/21 09:27**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.8 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 16:36 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD01-042921
**Lab Sample ID: 320-73172-3**
**Date Collected: 04/29/21 12:01**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275.8 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 16:45 | RS1 | TAL SAC |

## Client Sample ID: PWS1013-OS-042921-100
**Lab Sample ID: 320-73172-4**
**Date Collected: 04/29/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 262.5 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487929 | 05/11/21 10:29 | S1M | TAL SAC |

## Client Sample ID: PWS1012-OS-042921-100
**Lab Sample ID: 320-73172-6**
**Date Collected: 04/29/21 15:45**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.9 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487929 | 05/11/21 10:57 | S1M | TAL SAC |

## Client Sample ID: PWS1076-OS-042921-100
**Lab Sample ID: 320-73172-8**
**Date Collected: 04/29/21 16:27**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.7 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 17:32 | RS1 | TAL SAC |

## Client Sample ID: PWS1191-OS-042921-100
**Lab Sample ID: 320-73172-10**
**Date Collected: 04/29/21 17:38**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.4 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 17:42 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1147-OS-042921-100
**Lab Sample ID: 320-73172-12**
**Date Collected: 04/29/21 08:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 259.9 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 18:19 | RS1 | TAL SAC |

## Client Sample ID: PWS-FD02-042921
**Lab Sample ID: 320-73172-14**
**Date Collected: 04/29/21 12:02**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.8 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 18:29 | RS1 | TAL SAC |

## Client Sample ID: PWS1089-OS-042921-100
**Lab Sample ID: 320-73172-15**
**Date Collected: 04/29/21 09:25**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.1 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 18:38 | RS1 | TAL SAC |

## Client Sample ID: PWS1101-OS-042921-100
**Lab Sample ID: 320-73172-17**
**Date Collected: 04/29/21 10:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.2 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 18:48 | RS1 | TAL SAC |

## Client Sample ID: PWS1092-OS-042921-100
**Lab Sample ID: 320-73172-19**
**Date Collected: 04/29/21 11:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.8 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 18:57 | RS1 | TAL SAC |

## Client Sample ID: PWS1125-OS-042921-100
**Lab Sample ID: 320-73172-21**
**Date Collected: 04/29/21 12:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.7 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 19:07 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1155-OS-042921-100
**Lab Sample ID: 320-73172-23**
**Date Collected: 04/29/21 13:20**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266 mL | 10.00 mL | 486416 | 05/06/21 04:24 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487484 | 05/10/21 19:16 | RS1 | TAL SAC |

## Client Sample ID: PWS1127-OS-042921-100
**Lab Sample ID: 320-73172-25**
**Date Collected: 04/29/21 14:05**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.6 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:01 | D1R | TAL SAC |

## Client Sample ID: PWS1106-OS-042921-100
**Lab Sample ID: 320-73172-27**
**Date Collected: 04/29/21 14:50**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.5 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488306 | 05/12/21 13:30 | S1M | TAL SAC |

## Client Sample ID: PWS1161-OS-042921-100
**Lab Sample ID: 320-73172-29**
**Date Collected: 04/29/21 16:10**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.4 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:19 | D1R | TAL SAC |

## Client Sample ID: PWS1114-OS-042921-100
**Lab Sample ID: 320-73172-31**
**Date Collected: 04/29/21 17:15**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.5 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:29 | D1R | TAL SAC |

## Client Sample ID: PWS1070-OS-043021-100
**Lab Sample ID: 320-73172-33**
**Date Collected: 04/30/21 09:34**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275.2 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:38 | D1R | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1073-OS-043021-100
## Lab Sample ID: 320-73172-35
**Date Collected: 04/30/21 10:11**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:48 | D1R | TAL SAC |

## Client Sample ID: PWS1174-OS-043021-100
## Lab Sample ID: 320-73172-37
**Date Collected: 04/30/21 10:58**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 272.1 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 02:57 | D1R | TAL SAC |

## Client Sample ID: PWS1019-OS-043021-100
## Lab Sample ID: 320-73172-39
**Date Collected: 04/30/21 12:36**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.7 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 03:06 | D1R | TAL SAC |

## Client Sample ID: PWS1044-OS-043021-100
## Lab Sample ID: 320-73172-41
**Date Collected: 04/30/21 14:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 269.9 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 03:44 | D1R | TAL SAC |

## Client Sample ID: PWS1034-IS-043021-100
## Lab Sample ID: 320-73172-43
**Date Collected: 04/30/21 15:42**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.4 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 03:54 | D1R | TAL SAC |

## Client Sample ID: PWS1036-OS-043021-100
## Lab Sample ID: 320-73172-45
**Date Collected: 04/30/21 16:35**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.5 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 04:03 | D1R | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1023-OS-043021-100
**Lab Sample ID: 320-73172-47**
**Date Collected: 04/30/21 17:13**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.4 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 04:12 | D1R | TAL SAC |

## Client Sample ID: PWS1088-OS-043021-100
**Lab Sample ID: 320-73172-49**
**Date Collected: 04/30/21 18:31**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.3 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 04:22 | D1R | TAL SAC |

## Client Sample ID: PWS1103-OS-043021-100
**Lab Sample ID: 320-73172-51**
**Date Collected: 04/30/21 08:45**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.1 mL | 10.00 mL | 486417 | 05/06/21 04:36 | HK | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487766 | 05/11/21 04:31 | D1R | TAL SAC |

## Client Sample ID: PWS1134-OS-043021-100
**Lab Sample ID: 320-73172-53**
**Date Collected: 04/30/21 09:35**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.6 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 13:29 | K1S | TAL SAC |

## Client Sample ID: PWS-FD02-043021
**Lab Sample ID: 320-73172-55**
**Date Collected: 04/30/21 12:02**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.8 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 13:38 | K1S | TAL SAC |

## Client Sample ID: PWS1135-OS-043021-100
**Lab Sample ID: 320-73172-56**
**Date Collected: 04/30/21 10:00**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.3 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 13:47 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1136-OS-043021-100
**Lab Sample ID: 320-73172-58**
**Date Collected: 04/30/21 10:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 276 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 13:56 | K1S | TAL SAC |

## Client Sample ID: PWS1195-OS-043021-100
**Lab Sample ID: 320-73172-60**
**Date Collected: 04/30/21 11:50**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 239.2 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 14:05 | K1S | TAL SAC |

## Client Sample ID: PWS1189-OS-043021-100
**Lab Sample ID: 320-73172-62**
**Date Collected: 04/30/21 13:40**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 273.8 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 14:14 | K1S | TAL SAC |

## Client Sample ID: PWS1110-IS-043021-100
**Lab Sample ID: 320-73172-64**
**Date Collected: 04/30/21 13:30**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 263.8 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 14:23 | K1S | TAL SAC |

## Client Sample ID: PWS1063-OS-043021-100
**Lab Sample ID: 320-73172-66**
**Date Collected: 04/30/21 14:31**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.6 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 15:00 | K1S | TAL SAC |

## Client Sample ID: PWS1160-OS-043021-100
**Lab Sample ID: 320-73172-68**
**Date Collected: 04/30/21 17:29**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 296.6 mL | 10.00 mL | 486679 | 05/06/21 12:56 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 487291 | 05/08/21 15:09 | K1S | TAL SAC |

**Laboratory References:**
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73172-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73172-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73172-1 | PWS1180-OS-042921-100 | Water | 04/29/21 09:27 | 05/04/21 10:10 | |
| 320-73172-3 | PWS-FD01-042921 | Water | 04/29/21 12:01 | 05/04/21 10:10 | |
| 320-73172-4 | PWS1013-OS-042921-100 | Water | 04/29/21 10:30 | 05/04/21 10:10 | |
| 320-73172-6 | PWS1012-OS-042921-100 | Water | 04/29/21 15:45 | 05/04/21 10:10 | |
| 320-73172-8 | PWS1076-OS-042921-100 | Water | 04/29/21 16:27 | 05/04/21 10:10 | |
| 320-73172-10 | PWS1191-OS-042921-100 | Water | 04/29/21 17:38 | 05/04/21 10:10 | |
| 320-73172-12 | PWS1147-OS-042921-100 | Water | 04/29/21 08:40 | 05/04/21 10:10 | |
| 320-73172-14 | PWS-FD02-042921 | Water | 04/29/21 12:02 | 05/04/21 10:10 | |
| 320-73172-15 | PWS1089-OS-042921-100 | Water | 04/29/21 09:25 | 05/04/21 10:10 | |
| 320-73172-17 | PWS1101-OS-042921-100 | Water | 04/29/21 10:10 | 05/04/21 10:10 | |
| 320-73172-19 | PWS1092-OS-042921-100 | Water | 04/29/21 11:30 | 05/04/21 10:10 | |
| 320-73172-21 | PWS1125-OS-042921-100 | Water | 04/29/21 12:10 | 05/04/21 10:10 | |
| 320-73172-23 | PWS1155-OS-042921-100 | Water | 04/29/21 13:20 | 05/04/21 10:10 | |
| 320-73172-25 | PWS1127-OS-042921-100 | Water | 04/29/21 14:05 | 05/04/21 10:10 | |
| 320-73172-27 | PWS1106-OS-042921-100 | Water | 04/29/21 14:50 | 05/04/21 10:10 | |
| 320-73172-29 | PWS1161-OS-042921-100 | Water | 04/29/21 16:10 | 05/04/21 10:10 | |
| 320-73172-31 | PWS1114-OS-042921-100 | Water | 04/29/21 17:15 | 05/04/21 10:10 | |
| 320-73172-33 | PWS1070-OS-043021-100 | Water | 04/30/21 09:34 | 05/04/21 10:10 | |
| 320-73172-35 | PWS1073-OS-043021-100 | Water | 04/30/21 10:11 | 05/04/21 10:10 | |
| 320-73172-37 | PWS1174-OS-043021-100 | Water | 04/30/21 10:58 | 05/04/21 10:10 | |
| 320-73172-39 | PWS1019-OS-043021-100 | Water | 04/30/21 12:36 | 05/04/21 10:10 | |
| 320-73172-41 | PWS1044-OS-043021-100 | Water | 04/30/21 14:40 | 05/04/21 10:10 | |
| 320-73172-43 | PWS1034-IS-043021-100 | Water | 04/30/21 15:42 | 05/04/21 10:10 | |
| 320-73172-45 | PWS1036-OS-043021-100 | Water | 04/30/21 16:35 | 05/04/21 10:10 | |
| 320-73172-47 | PWS1023-OS-043021-100 | Water | 04/30/21 17:13 | 05/04/21 10:10 | |
| 320-73172-49 | PWS1088-OS-043021-100 | Water | 04/30/21 18:31 | 05/04/21 10:10 | |
| 320-73172-51 | PWS1103-OS-043021-100 | Water | 04/30/21 08:45 | 05/04/21 10:10 | |
| 320-73172-53 | PWS1134-OS-043021-100 | Water | 04/30/21 09:35 | 05/04/21 10:10 | |
| 320-73172-55 | PWS-FD02-043021 | Water | 04/30/21 12:02 | 05/04/21 10:10 | |
| 320-73172-56 | PWS1135-OS-043021-100 | Water | 04/30/21 10:00 | 05/04/21 10:10 | |
| 320-73172-58 | PWS1136-OS-043021-100 | Water | 04/30/21 10:30 | 05/04/21 10:10 | |
| 320-73172-60 | PWS1195-OS-043021-100 | Water | 04/30/21 11:50 | 05/04/21 10:10 | |
| 320-73172-62 | PWS1189-OS-043021-100 | Water | 04/30/21 13:40 | 05/04/21 10:10 | |
| 320-73172-64 | PWS1110-IS-043021-100 | Water | 04/30/21 13:30 | 05/04/21 10:10 | |
| 320-73172-66 | PWS1063-OS-043021-100 | Water | 04/30/21 14:31 | 05/04/21 10:10 | |
| 320-73172-68 | PWS1160-OS-043021-100 | Water | 04/30/21 17:29 | 05/04/21 10:10 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.033 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73172 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1180-OS-042921-100 | 4/29/2021 | 927 | G | Water | N | N | X | 2 | |
| PWS1180-OS-042921-200 | 4/29/2021 | 909 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042921 | 4/29/2021 | 1201 | G | Water | N | N | X | 2 | |
| PWS1013-OS-042921-100 | 4/29/2021 | 1030 | G | Water | N | Y | X | 2 | |
| PWS1013-OS-042921-200 | 4/29/2021 | 1006 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042921 | 4/29/2021 | 1030 | G | Water | N | N | X | 2 | Parent sample is: PWS1013-OS-042921-100 |
| PWS-MSD01-042921 | 4/29/2021 | 1030 | G | Water | N | N | X | 2 | Parent sample is: PWS1013-OS-042921-100 |
| PWS1012-OS-042921-100 | 4/29/2021 | 1545 | G | Water | N | N | X | 2 | |
| PWS1012-OS-042821-200 | 4/29/2021 | 1519 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1076-OS-042921-100 | 4/29/2021 | 1627 | G | Water | N | N | X | 2 | |
| PWS1076-OS-042921-200 | 4/29/2021 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Kamina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 / 1502706 / 1502705 / 1502709 / 1598284 / 1598295

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

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5/13/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.034 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1191-OS-042921-100 | 4/29/2021 | 1738 | G | Water | N | N | X | 2 | |
| PWS1191-OS-042921-200 | 4/29/2021 | 1720 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1147-OS-042921-100 | 4/29/2021 | 840 | G | Water | N | N | X | 2 | |
| PWS1147-OS-042921-200 | 4/29/2021 | 845 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042921 | 4/29/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1089-OS-042921-100 | 4/29/2021 | 925 | G | Water | N | N | X | 2 | |
| PWS1089-OS-042921-200 | 4/29/2021 | 930 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1101-OS-042921-100 | 4/29/2021 | 1010 | G | Water | N | Y | X | 2 | |
| PWS1101-OS-042921-200 | 4/29/2021 | 1015 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1092-OS-042921-100 | 4/29/2021 | 1130 | G | Water | N | N | X | 2 | |
| PWS1092-OS-042921-200 | 4/29/2021 | 1135 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ⚠ Yes ∆ No
Custody Seal No.: 1598280/1598281/1598282/1598283/1502707 1502706/1502708/1502709/~~1502~~ 1598284/1598285 SS 5/4/21

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019



5/13/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.035 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1125-OS-042921-100 | 4/29/2021 | 1210 | G | Water | N | N | X | 2 | |
| PWS1125-OS-042921-200 | 4/29/2021 | 1215 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1155-OS-042921-100 | 4/29/2021 | 1320 | G | Water | N | N | X | 2 | |
| PWS1155-OS-042921-200 | 4/29/2021 | 1325 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1127-OS-042921-100 | 4/29/2021 | 1405 | G | Water | N | N | X | 2 | |
| PWS1127-OS-042921-200 | 4/29/2021 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1106-OS-042921-100 | 4/29/2021 | 1450 | G | Water | N | N | X | 2 | |
| PWS1106-OS-042921-200 | 4/29/2021 | 1455 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1161-OS-042921-100 | 4/29/2021 | 1610 | G | Water | N | N | X | 2 | |
| PWS1161-OS-042921-200 | 4/29/2021 | 1615 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1114-OS-042921-100 | 4/29/2021 | 1715 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 1130 | Wood | | 5/4/21 1000 | EDASC |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019



5/13/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.036 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1114-OS-042921-200 | 4/29/2021 | 1720 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1070-OS-043021-100 | 4/30/2021 | 934 | G | Water | N | N | X | 2 | |
| PWS1070-OS-043021-200 | 4/30/2021 | 907 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1073-OS-043021-100 | 4/30/2021 | 1011 | G | Water | N | N | X | 2 | |
| PWS1073-OS-043021-200 | 4/30/2021 | 954 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1174-OS-043021-100 | 4/30/2021 | 1058 | G | Water | N | N | X | 2 | |
| PWS1174-OS-043021-200 | 4/30/2021 | 1039 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1019-OS-043021-100 | 4/30/2021 | 1236 | G | Water | N | Y | X | 2 | |
| PWS1019-OS-043021-200 | 4/30/2021 | 1214 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1044-OS-043021-100 | 4/30/2021 | 1440 | G | Water | N | N | X | 2 | |
| PWS1044-OS-043021-200 | 4/30/2021 | 1415 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280/1598281/1598282/1598283/1502707 1502706/1502708/1502709/1598284/1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 1.6, 1.1

Ver: 01/16/2019

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5/13/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.037 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | | N | | |
| PWS1034-IS-043021-100 | 4/30/2021 | 1542 | G | Water | N | N | X | 2 | |
| PWS1034-IS-043021-200 | 4/30/2021 | 1522 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1036-OS-043021-100 | 4/30/2021 | 1635 | G | Water | N | N | X | 2 | |
| PWS1036-OS-043021-200 | 4/30/2021 | 1612 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1023-OS-043021-100 | 4/30/2021 | 1713 | G | Water | N | N | X | 2 | |
| PWS1023-OS-043021-200 | 4/30/2021 | 1654 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1088-OS-043021-100 | 4/30/2021 | 1831 | G | Water | N | N | X | 2 | |
| PWS1088-OS-043021-200 | 4/30/2021 | 1804 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1103-OS-043021-100 | 4/30/2021 | 845 | G | Water | N | Y | X | 2 | |
| PWS1103-OS-043021-200 | 4/30/2021 | 850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-043021 | 4/30/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1103-OS-043021-100 |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 / 1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: -1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

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5/13/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.038 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS-MSD02-043021 | 4/30/2021 | 845 | G | Water | N | Y | X | 2 | Parent sample is: PWS1103-OS-043021-100 |
| PWS1134-OS-043021-100 | 4/30/2021 | 935 | G | Water | N | N | X | 2 | |
| PWS1134-OS-043021-200 | 4/30/2021 | 940 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-043021 | 4/30/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1135-OS-043021-100 | 4/30/2021 | 1000 | G | Water | N | N | X | 2 | |
| PWS1135-OS-043021-200 | 4/30/2021 | 1005 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1136-OS-043021-100 | 4/30/2021 | 1030 | G | Water | N | N | X | 2 | |
| PWS1136-OS-043021-200 | 4/30/2021 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1195-OS-043021-100 | 4/30/2021 | 1150 | G | Water | N | N | X | 2 | |
| PWS1195-OS-043021-200 | 4/30/2021 | 1155 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1189-OS-043021-100 | 4/30/2021 | 1340 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Date/Time | Company | | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: Karina Caseff | 5-3-21 @ 11:30 | Wood | Received by: | 5/4/21 1010 | [illegible] |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.5, 2.6, 1.1

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**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.039 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1189-OS-043021-200 | 4/30/2021 | 1345 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1110-IS-050121-100 | 5/1/2021 | 1330 | G | Water | N | N | X | 2 | |
| PWS1110-IS-050121-200 | 5/1/2021 | 1258 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1063-OS-050121-100 | 5/1/2021 | 1431 | G | Water | N | N | X | 2 | |
| PWS1063-OS-050121-200 | 5/1/2021 | 1405 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1160-OS-050121-100 | 5/1/2021 | 1729 | G | Water | N | N | X | 2 | |
| PWS1160-OS-050121-200 | 5/1/2021 | 1706 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21@1130 | Wood | | 5/9/21 1010 | FedEx |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1598280/1598281/1598282/1598283/1502707 1502706/1502708/1502709/1598284/1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

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# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73172-1

**Login Number: 73172**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1598280/1598281/1598282/1598283/1502707/1502706/1502708/1502709/1598284/1598285 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

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# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73356-1
Client Project/Site: WDNR - Campbell WI

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/14/2021 1:39:24 PM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-73356-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73356-1**

**Receipt**
The samples were received on 5/7/2021 10:05 AM. 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 0.6º C and 0.8º C.

**LCMS**
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analytes was outside of the established ratio limits. The qualitative identification of the analytes have some degree of uncertainty, and the reported values may have some high bias. However, analyst judgment was used to positively identify the analytes.

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

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Client Sample ID: PUB1204-TN-050421-100 — Lab Sample ID: 320-73356-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.2 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.5 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.4 | | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.89 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.7 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | I | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.6 | | 1.7 | 0.85 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1207-TN-050421-100 — Lab Sample ID: 320-73356-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorohexanoic acid (PFHxA) | 0.60 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.3 | J | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.50 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.3 | J | 1.8 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.94 | J | 1.8 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1220-NN-050421-100 — Lab Sample ID: 320-73356-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.4 | J | 4.3 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.1 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.3 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.5 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.83 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.6 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1214-TN-050521-100 — Lab Sample ID: 320-73356-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.1 | J | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.56 | J | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.59 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.2 | J | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 4.9 | | 1.7 | 0.86 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB-FD01-050521 — Lab Sample ID: 320-73356-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.3 | J | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.60 | J | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.72 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.2 | J | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.92 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.32 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.2 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.0 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

## Client Sample ID: PUB-FD01-050521 (Continued) — Lab Sample ID: 320-73356-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 3.7 | | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1213-TN-050521-100 — Lab Sample ID: 320-73356-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 23 | | 4.1 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | | 1.6 | 0.40 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.6 | | 1.6 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.2 | J | 1.6 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 6.6 | | 1.6 | 0.70 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 8.5 | | 1.6 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.53 | J | 1.6 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.7 | | 1.6 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 11 | | 1.6 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.5 | | 1.6 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1212-TN-050521-100 — Lab Sample ID: 320-73356-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 48 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 4.9 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.2 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 2.6 | | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 19 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 5.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.99 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.0 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.29 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.3 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.8 | | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1205-TN-050521-100 — Lab Sample ID: 320-73356-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.37 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.85 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1206-TN-050521-100 — Lab Sample ID: 320-73356-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.57 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.8 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.7 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1217-NN-050121-100 — Lab Sample ID: 320-73356-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.1 | | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 1.8 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.8 | | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PUB1217-NN-050121-100 (Continued) — Lab Sample ID: 320-73356-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanoic acid (PFHpA) | 1.6 | J | 1.8 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.7 | | 1.8 | 0.75 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.49 | J | 1.8 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.47 | J | 1.8 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.0 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.2 | | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB-FD01-050121 — Lab Sample ID: 320-73356-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.6 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.3 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.7 | | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 3.2 | | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.43 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.54 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.2 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1204-TN-050421-100**
**Date Collected: 05/04/21 09:21**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-1**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.2** | | 4.3 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.9** | | 1.7 | 0.42 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.5** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.4** | | 1.7 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.2** | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.89** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.7** | | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.2** | **I** | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.6** | | 1.7 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 21:37 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *71* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFHxA* | *74* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C4 PFHpA* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C4 PFOA* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |

## Client Sample ID: PUB1204-TN-050421-100

**Lab Sample ID: 320-73356-1**

**Date Collected: 05/04/21 09:21**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C5 PFNA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFDA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFUnA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFDoA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFTeDA* | *69* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 PFHxDA* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C3 PFBS* | *73* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *18O2 PFHxS* | *70* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C4 PFOS* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C8 FOSA* | *71* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *M2-6:2 FTS* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *M2-8:2 FTS* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C2 10:2 FTS* | *90* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *13C3 HFPO-DA* | *74* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d3-NMeFOSAA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d-N-MeFOSA-M* | *62* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d-N-EtFOSA-M* | *62* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |
| *d9-N-EtFOSE-M* | *72* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 21:37* | *1* |

## Client Sample ID: PUB1207-TN-050421-100

**Lab Sample ID: 320-73356-3**

**Date Collected: 05/04/21 14:30**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.4 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.43 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.60** | **J** | 1.8 | 0.51 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.3** | **J** | 1.8 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.78 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.50** | **J** | 1.8 | 0.18 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 1.8 | 0.50 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1207-TN-050421-100**
**Date Collected: 05/04/21 14:30**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.3** | **J** | 1.8 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.94** | **J** | 1.8 | 0.86 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NEtFOSA | ND | | 1.8 | 0.76 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 22:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C4 PFHpA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C4 PFOA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C5 PFNA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFDA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFDoA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFTeDA* | *73* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *18O2 PFHxS* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C4 PFOS* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C8 FOSA* | *79* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *M2-4:2 FTS* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *M2-6:2 FTS* | *95* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *M2-8:2 FTS* | *94* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C2 10:2 FTS* | *94* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d7-N-MeFOSE-M* | *83* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:05* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Client Sample ID: PUB1220-NN-050421-100

**Date Collected: 05/04/21 15:34**
**Date Received: 05/07/21 10:05**

## Lab Sample ID: 320-73356-5

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.4** | **J** | 4.3 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.1** | **J** | 1.7 | 0.42 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.3** | **J** | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.5** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.83** | **J** | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.6** | **J** | 1.7 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:49 | 05/11/21 22:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:15* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:15* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:15* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:15* | *1* |
| *13C4 PFOA* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:15* | *1* |

## Client Sample ID: PUB1220-NN-050421-100

**Lab Sample ID: 320-73356-5**

**Date Collected: 05/04/21 15:34**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 90 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 PFDA | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 PFUnA | 83 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 PFDoA | 83 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 PFTeDA | 74 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 18O2 PFHxS | 77 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C4 PFOS | 83 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C8 FOSA | 82 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| M2-4:2 FTS | 97 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| M2-6:2 FTS | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| M2-8:2 FTS | 96 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C2 10:2 FTS | 97 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| 13C3 HFPO-DA | 78 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d5-NEtFOSAA | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d-N-MeFOSA-M | 60 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d-N-EtFOSA-M | 68 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d7-N-MeFOSE-M | 80 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |
| d9-N-EtFOSE-M | 83 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:15 | 1 |

## Client Sample ID: PUB1214-TN-050521-100

**Lab Sample ID: 320-73356-7**

**Date Collected: 05/05/21 09:14**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.1** | **J** | 4.4 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.56** | **J** | 1.7 | 0.43 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.51 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.24 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.64 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.78 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.59** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.7 | 0.50 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1214-TN-050521-100**
**Date Collected: 05/05/21 09:14**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-7**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **1.2** | **J** | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **4.9** | | 1.7 | 0.86 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NMeFOSA | ND | | 1.7 | 0.38 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.59 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 22:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C5 PFPeA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C5 PFNA* | *90* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFDoA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFTeDA* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 PFHxDA* | *85* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C4 PFOS* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *M2-4:2 FTS* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *M2-6:2 FTS* | *92* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *M2-8:2 FTS* | *98* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d-N-MeFOSA-M* | *64* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d-N-EtFOSA-M* | *61* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |
| *d9-N-EtFOSE-M* | *88* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:24* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB-FD01-050521**
**Date Collected: 05/05/21 12:01**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-9**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.3** | **J** | 4.2 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.60** | **J** | 1.7 | 0.41 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.72** | **J** | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.2** | **J** | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.92** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.32** | **J** | 1.7 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.2** | **J** | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.0** | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.7** | | 1.7 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:49 | 05/11/21 22:34 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:34* | *1* |
| *13C5 PFPeA* | *98* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:34* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:34* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:34* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:34* | *1* |

## Client Sample ID: PUB-FD01-050521

**Lab Sample ID: 320-73356-9**

**Date Collected: 05/05/21 12:01**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 109 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 PFDA | 99 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 PFUnA | 106 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 PFDoA | 103 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 PFTeDA | 90 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 PFHxDA | 97 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 18O2 PFHxS | 96 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C4 PFOS | 96 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| M2-4:2 FTS | 103 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| M2-6:2 FTS | 110 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| M2-8:2 FTS | 119 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C2 10:2 FTS | 121 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d3-NMeFOSAA | 97 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d5-NEtFOSAA | 103 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |
| d9-N-EtFOSE-M | 96 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 22:34 | 1 |

## Client Sample ID: PUB1213-TN-050521-100

**Lab Sample ID: 320-73356-10**

**Date Collected: 05/05/21 10:06**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **23** | | 4.1 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | | 1.6 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.6** | | 1.6 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.2** | **J** | 1.6 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **6.6** | | 1.6 | 0.70 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.6 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.6 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.6 | 0.90 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.6 | 0.45 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.6 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.6 | 0.60 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.6 | 0.73 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.6 | 0.77 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **8.5** | | 1.6 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.53** | **J** | 1.6 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.7** | | 1.6 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.6 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1213-TN-050521-100**
**Date Collected: 05/05/21 10:06**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-10**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **11** | | 1.6 | 0.44 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.6 | 0.30 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.6 | 0.79 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.5** | | 1.6 | 0.80 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NMeFOSA | ND | | 1.6 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NEtFOSA | ND | | 1.6 | 0.71 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.98 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NMeFOSE | ND | | 3.3 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| NEtFOSE | ND | | 1.6 | 0.70 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| 4:2 FTS | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| 8:2 FTS | ND | | 1.6 | 0.38 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| 10:2 FTS | ND | | 1.6 | 0.55 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| F-53B Major | ND | | 1.6 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| F-53B Minor | ND | | 1.6 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.6 | 0.33 | ng/L | | 05/10/21 11:49 | 05/11/21 22:43 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFHxA* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C4 PFHpA* | *70* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C4 PFOA* | *74* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C5 PFNA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFDA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFUnA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFDoA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFTeDA* | *70* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 PFHxDA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C3 PFBS* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *18O2 PFHxS* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C4 PFOS* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C8 FOSA* | *73* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *M2-4:2 FTS* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *M2-6:2 FTS* | *80* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *M2-8:2 FTS* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C2 10:2 FTS* | *91* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *13C3 HFPO-DA* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d5-NEtFOSAA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d-N-MeFOSA-M* | *60* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d-N-EtFOSA-M* | *59* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d7-N-MeFOSE-M* | *69* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 22:43* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1212-TN-050521-100**
**Date Collected: 05/05/21 10:43**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-12**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **48** | | 4.2 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **4.9** | | 1.7 | 0.41 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.2** | | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **2.6** | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **19** | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **5.1** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.99** | **J** | 1.7 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.0** | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.29** | **J** | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **9.3** | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.8** | | 1.7 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:49 | 05/11/21 23:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:21* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:21* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:21* | *1* |
| *13C4 PFHpA* | *77* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:21* | *1* |
| *13C4 PFOA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:21* | *1* |

## Client Sample ID: PUB1212-TN-050521-100

**Lab Sample ID: 320-73356-12**

**Date Collected: 05/05/21 10:43**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 89 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 PFDA | 81 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 PFUnA | 79 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 PFDoA | 84 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 PFTeDA | 74 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 PFHxDA | 76 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C3 PFBS | 75 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 18O2 PFHxS | 80 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C4 PFOS | 74 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C8 FOSA | 76 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| M2-4:2 FTS | 84 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| M2-6:2 FTS | 84 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C2 10:2 FTS | 93 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| 13C3 HFPO-DA | 78 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d3-NMeFOSAA | 82 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d5-NEtFOSAA | 84 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d-N-MeFOSA-M | 61 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d-N-EtFOSA-M | 60 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d7-N-MeFOSE-M | 79 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |
| d9-N-EtFOSE-M | 80 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:21 | 1 |

## Client Sample ID: PUB1205-TN-050521-100

**Lab Sample ID: 320-73356-14**

**Date Collected: 05/05/21 11:22**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.2 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.37** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1205-TN-050521-100**
**Date Collected: 05/05/21 11:22**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-14**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.85** | **J** | 1.7 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/10/21 11:49 | 05/11/21 23:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *61* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C5 PFPeA* | *62* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFHxA* | *68* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C4 PFHpA* | *66* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C4 PFOA* | *70* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C5 PFNA* | *75* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFDA* | *74* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFUnA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFDoA* | *73* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFTeDA* | *64* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 PFHxDA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C3 PFBS* | *63* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *18O2 PFHxS* | *70* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C4 PFOS* | *69* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C8 FOSA* | *69* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *M2-4:2 FTS* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *M2-6:2 FTS* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *M2-8:2 FTS* | *82* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C2 10:2 FTS* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *13C3 HFPO-DA* | *64* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d5-NEtFOSAA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d-N-MeFOSA-M* | *52* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d-N-EtFOSA-M* | *58* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d7-N-MeFOSE-M* | *68* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |
| *d9-N-EtFOSE-M* | *71* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:30* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1206-TN-050521-100**
**Date Collected: 05/05/21 13:42**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-16**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.1 | 2.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.70 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.60 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.57** | **J** | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.8** | | 1.7 | 0.45 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.80 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.7 | 0.81 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.99 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| NEtFOSE | ND | | 1.7 | 0.70 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.55 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| F-53B Minor | ND | | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/10/21 11:49 | 05/11/21 23:40 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:40* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:40* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:40* | *1* |
| *13C4 PFHpA* | *85* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:40* | *1* |
| *13C4 PFOA* | *84* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:40* | *1* |

## Client Sample ID: PUB1206-TN-050521-100

**Lab Sample ID: 320-73356-16**

**Date Collected: 05/05/21 13:42**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 PFDA | 87 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 PFDoA | 87 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 PFTeDA | 79 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 PFHxDA | 84 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C3 PFBS | 81 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C8 FOSA | 82 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| M2-4:2 FTS | 82 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| M2-6:2 FTS | 88 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| M2-8:2 FTS | 86 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C2 10:2 FTS | 93 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| 13C3 HFPO-DA | 78 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d3-NMeFOSAA | 83 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d5-NEtFOSAA | 90 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:40 | 1 |

## Client Sample ID: PUB1217-NN-050121-100

**Lab Sample ID: 320-73356-18**

**Date Collected: 05/05/21 15:36**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.1** | | 4.4 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.9** | | 1.8 | 0.43 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.8** | | 1.8 | 0.51 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.6** | **J** | 1.8 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.7** | | 1.8 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.49** | **J** | 1.8 | 0.24 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.97 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.64 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | | 1.8 | 0.18 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.47** | **J** | 1.8 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.0** | | 1.8 | 0.50 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB1217-NN-050121-100**
**Date Collected: 05/05/21 15:36**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-18**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.2** | | 1.8 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.87 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 23:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFHxA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C4 PFOA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C5 PFNA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFDA* | *80* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFTeDA* | *76* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 PFHxDA* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C3 PFBS* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *18O2 PFHxS* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C4 PFOS* | *84* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C8 FOSA* | *80* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *M2-4:2 FTS* | *89* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *M2-6:2 FTS* | *81* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *M2-8:2 FTS* | *96* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C2 10:2 FTS* | *95* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *13C3 HFPO-DA* | *78* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d5-NEtFOSAA* | *86* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d-N-MeFOSA-M* | *59* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |
| *d9-N-EtFOSE-M* | *82* | | *10 - 150* | *05/10/21 11:49* | *05/11/21 23:49* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB-FD01-050121**
**Date Collected: 05/05/21 12:01**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-20**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.6** | | 4.3 | 2.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.9** | | 1.7 | 0.43 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.3** | | 1.7 | 0.50 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.7** | | 1.7 | 0.22 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **3.2** | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.43** | **J** | 1.7 | 0.23 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.9** | | 1.7 | 0.17 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.54** | **J** | 1.7 | 0.26 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.2** | | 1.7 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.4** | | 1.7 | 0.47 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/10/21 11:49 | 05/11/21 23:58 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:58* | *1* |
| *13C5 PFPeA* | *67* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:58* | *1* |
| *13C2 PFHxA* | *72* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:58* | *1* |
| *13C4 PFHpA* | *67* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:58* | *1* |
| *13C4 PFOA* | *71* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 23:58* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

**Client Sample ID: PUB-FD01-050121**
**Date Collected: 05/05/21 12:01**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73356-20**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 74 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 PFDA | 75 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 PFUnA | 79 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 PFDoA | 81 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 PFTeDA | 68 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 PFHxDA | 78 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C3 PFBS | 69 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 18O2 PFHxS | 73 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C4 PFOS | 75 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C8 FOSA | 72 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| M2-4:2 FTS | 73 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| M2-6:2 FTS | 78 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C2 10:2 FTS | 94 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| 13C3 HFPO-DA | 68 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d5-NEtFOSAA | 81 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d-N-MeFOSA-M | 54 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d-N-EtFOSA-M | 60 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d7-N-MeFOSE-M | 74 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |
| d9-N-EtFOSE-M | 65 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 23:58 | 1 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFBA | PFPeA | PFHxA | C4PFHA | PFOA | PFNA | PFDA | PFUnA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) |
| 320-73356-1 | PUB1204-TN-050421-100 | 71 | 75 | 74 | 72 | 75 | 81 | 76 | 79 |
| 320-73356-1 MS | PUB-MS01-050421 | 79 | 75 | 83 | 76 | 80 | 82 | 77 | 87 |
| 320-73356-1 MSD | PUB-MSD01-050421 | 77 | 76 | 75 | 77 | 74 | 84 | 78 | 84 |
| 320-73356-3 | PUB1207-TN-050421-100 | 82 | 83 | 79 | 76 | 83 | 83 | 83 | 91 |
| 320-73356-5 | PUB1220-NN-050421-100 | 88 | 83 | 87 | 82 | 82 | 90 | 85 | 83 |
| 320-73356-7 | PUB1214-TN-050521-100 | 88 | 87 | 88 | 88 | 87 | 90 | 88 | 93 |
| 320-73356-9 | PUB-FD01-050521 | 101 | 98 | 99 | 100 | 99 | 109 | 99 | 106 |
| 320-73356-10 | PUB1213-TN-050521-100 | 77 | 74 | 75 | 70 | 74 | 79 | 78 | 81 |
| 320-73356-12 | PUB1212-TN-050521-100 | 81 | 77 | 83 | 77 | 78 | 89 | 81 | 79 |
| 320-73356-14 | PUB1205-TN-050521-100 | 61 | 62 | 68 | 66 | 70 | 75 | 74 | 81 |
| 320-73356-16 | PUB1206-TN-050521-100 | 86 | 77 | 84 | 85 | 84 | 94 | 87 | 92 |
| 320-73356-18 | PUB1217-NN-050121-100 | 86 | 78 | 78 | 81 | 81 | 87 | 80 | 88 |
| 320-73356-20 | PUB-FD01-050121 | 79 | 67 | 72 | 67 | 71 | 74 | 75 | 79 |
| LCS 320-487630/2-A | Lab Control Sample | 108 | 104 | 95 | 100 | 100 | 103 | 92 | 104 |
| MB 320-487630/1-A | Method Blank | 127 | 120 | 115 | 120 | 110 | 122 | 113 | 122 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFDoA | PFTDA | PFHxDA | C3PFBS | PFHxS | PFOS | PFOSA | M242FTS |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (25-150) |
| 320-73356-1 | PUB1204-TN-050421-100 | 83 | 69 | 75 | 73 | 70 | 75 | 71 | 85 |
| 320-73356-1 MS | PUB-MS01-050421 | 82 | 75 | 82 | 76 | 75 | 79 | 84 | 81 |
| 320-73356-1 MSD | PUB-MSD01-050421 | 82 | 67 | 80 | 73 | 73 | 76 | 73 | 82 |
| 320-73356-3 | PUB1207-TN-050421-100 | 83 | 73 | 82 | 79 | 76 | 82 | 79 | 82 |
| 320-73356-5 | PUB1220-NN-050421-100 | 83 | 74 | 82 | 85 | 77 | 83 | 82 | 97 |
| 320-73356-7 | PUB1214-TN-050521-100 | 88 | 72 | 85 | 85 | 83 | 86 | 82 | 81 |
| 320-73356-9 | PUB-FD01-050521 | 103 | 90 | 97 | 91 | 96 | 96 | 95 | 103 |
| 320-73356-10 | PUB1213-TN-050521-100 | 78 | 70 | 76 | 75 | 72 | 72 | 73 | 81 |
| 320-73356-12 | PUB1212-TN-050521-100 | 84 | 74 | 76 | 75 | 80 | 74 | 76 | 84 |
| 320-73356-14 | PUB1205-TN-050521-100 | 73 | 64 | 76 | 63 | 70 | 69 | 69 | 78 |
| 320-73356-16 | PUB1206-TN-050521-100 | 87 | 79 | 84 | 81 | 82 | 80 | 82 | 82 |
| 320-73356-18 | PUB1217-NN-050121-100 | 87 | 76 | 81 | 78 | 78 | 84 | 80 | 89 |
| 320-73356-20 | PUB-FD01-050121 | 81 | 68 | 78 | 69 | 73 | 75 | 72 | 73 |
| LCS 320-487630/2-A | Lab Control Sample | 100 | 82 | 84 | 101 | 87 | 94 | 91 | 98 |
| MB 320-487630/1-A | Method Blank | 123 | 100 | 104 | 122 | 103 | 114 | 109 | 110 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | M262FTS | M282FTS | M102FTS | HFPODA | d3NMFOSA | d5NEFOSA | dMeFOSAA | dEtFOSAA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (10-150) |
| 320-73356-1 | PUB1204-TN-050421-100 | 86 | 86 | 90 | 74 | 76 | 78 | 62 | 62 |
| 320-73356-1 MS | PUB-MS01-050421 | 83 | 94 | 98 | 83 | 84 | 85 | 66 | 67 |
| 320-73356-1 MSD | PUB-MSD01-050421 | 80 | 85 | 91 | 83 | 73 | 72 | 63 | 63 |
| 320-73356-3 | PUB1207-TN-050421-100 | 95 | 94 | 94 | 87 | 80 | 85 | 63 | 71 |
| 320-73356-5 | PUB1220-NN-050421-100 | 85 | 96 | 97 | 78 | 77 | 85 | 60 | 68 |
| 320-73356-7 | PUB1214-TN-050521-100 | 92 | 98 | 104 | 86 | 83 | 90 | 64 | 61 |
| 320-73356-9 | PUB-FD01-050521 | 110 | 119 | 121 | 97 | 97 | 103 | 76 | 69 |
| 320-73356-10 | PUB1213-TN-050521-100 | 80 | 87 | 91 | 72 | 71 | 79 | 60 | 59 |
| 320-73356-12 | PUB1212-TN-050521-100 | 84 | 85 | 93 | 78 | 82 | 84 | 61 | 60 |
| 320-73356-14 | PUB1205-TN-050521-100 | 88 | 82 | 88 | 64 | 71 | 79 | 52 | 58 |
| 320-73356-16 | PUB1206-TN-050521-100 | 88 | 86 | 93 | 78 | 83 | 90 | 69 | 69 |
| 320-73356-18 | PUB1217-NN-050121-100 | 81 | 96 | 95 | 78 | 79 | 86 | 59 | 65 |
| 320-73356-20 | PUB-FD01-050121 | 78 | 85 | 94 | 68 | 77 | 81 | 54 | 60 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73356-1
Project/Site: WDNR - Campbell WI

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| LCS 320-487630/2-A | Lab Control Sample | 109 | 109 | 113 | 101 | 92 | 94 | 74 | 82 |
| MB 320-487630/1-A | Method Blank | 123 | 139 | 136 | 116 | 103 | 127 | 89 | 92 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) |
| 320-73356-1 | PUB1204-TN-050421-100 | 82 | 72 |
| 320-73356-1 MS | PUB-MS01-050421 | 76 | 78 |
| 320-73356-1 MSD | PUB-MSD01-050421 | 73 | 78 |
| 320-73356-3 | PUB1207-TN-050421-100 | 83 | 80 |
| 320-73356-5 | PUB1220-NN-050421-100 | 80 | 83 |
| 320-73356-7 | PUB1214-TN-050521-100 | 84 | 88 |
| 320-73356-9 | PUB-FD01-050521 | 100 | 96 |
| 320-73356-10 | PUB1213-TN-050521-100 | 69 | 77 |
| 320-73356-12 | PUB1212-TN-050521-100 | 79 | 80 |
| 320-73356-14 | PUB1205-TN-050521-100 | 68 | 71 |
| 320-73356-16 | PUB1206-TN-050521-100 | 83 | 85 |
| 320-73356-18 | PUB1217-NN-050121-100 | 76 | 82 |
| 320-73356-20 | PUB-FD01-050121 | 74 | 65 |
| LCS 320-487630/2-A | Lab Control Sample | 96 | 100 |
| MB 320-487630/1-A | Method Blank | 115 | 117 |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-487630/1-A**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/10/21 11:49 | 05/11/21 21:18 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *127* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |
| *13C5 PFPeA* | *120* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |
| *13C2 PFHxA* | *115* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |
| *13C4 PFHpA* | *120* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |
| *13C4 PFOA* | *110* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |
| *13C5 PFNA* | *122* | | *25 - 150* | *05/10/21 11:49* | *05/11/21 21:18* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-487630/1-A**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 113 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C2 PFUnA | 122 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C2 PFDoA | 123 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C2 PFTeDA | 100 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C2 PFHxDA | 104 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C3 PFBS | 122 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 18O2 PFHxS | 103 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C4 PFOS | 114 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C8 FOSA | 109 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| M2-4:2 FTS | 110 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| M2-6:2 FTS | 123 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| M2-8:2 FTS | 139 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C2 10:2 FTS | 136 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| 13C3 HFPO-DA | 116 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d3-NMeFOSAA | 103 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d5-NEtFOSAA | 127 | | 25 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d-N-MeFOSA-M | 89 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d-N-EtFOSA-M | 92 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d7-N-MeFOSE-M | 115 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |
| d9-N-EtFOSE-M | 117 | | 10 - 150 | 05/10/21 11:49 | 05/11/21 21:18 | 1 |

**Lab Sample ID: LCS 320-487630/2-A**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 46.3 | | ng/L | | 116 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 40.8 | | ng/L | | 102 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 38.6 | | ng/L | | 97 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 46.8 | | ng/L | | 117 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 47.9 | | ng/L | | 120 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.2 | | ng/L | | 108 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 34.7 | | ng/L | | 93 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 37.3 | | ng/L | | 103 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487630/2-A**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 38.5 | | ng/L | | 101 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.6 | | ng/L | | 98 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 42.9 | | ng/L | | 111 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 37.5 | | ng/L | | 97 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| NMeFOSA | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| NEtFOSA | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| NMeFOSAA | 40.0 | 45.1 | | ng/L | | 113 | 60 - 135 |
| NEtFOSAA | 40.0 | 46.5 | | ng/L | | 116 | 60 - 135 |
| NMeFOSE | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| NEtFOSE | 40.0 | 35.2 | | ng/L | | 88 | 60 - 135 |
| 4:2 FTS | 37.4 | 35.4 | | ng/L | | 95 | 60 - 135 |
| 6:2 FTS | 37.9 | 37.3 | | ng/L | | 98 | 60 - 135 |
| 8:2 FTS | 38.3 | 44.9 | | ng/L | | 117 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.6 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 43.8 | | ng/L | | 110 | 60 - 135 |
| F-53B Major | 37.3 | 40.2 | | ng/L | | 108 | 60 - 135 |
| F-53B Minor | 37.7 | 37.2 | | ng/L | | 99 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 40.9 | | ng/L | | 108 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *108* | | *25 - 150* |
| *13C5 PFPeA* | *104* | | *25 - 150* |
| *13C2 PFHxA* | *95* | | *25 - 150* |
| *13C4 PFHpA* | *100* | | *25 - 150* |
| *13C4 PFOA* | *100* | | *25 - 150* |
| *13C5 PFNA* | *103* | | *25 - 150* |
| *13C2 PFDA* | *92* | | *25 - 150* |
| *13C2 PFUnA* | *104* | | *25 - 150* |
| *13C2 PFDoA* | *100* | | *25 - 150* |
| *13C2 PFTeDA* | *82* | | *25 - 150* |
| *13C2 PFHxDA* | *84* | | *25 - 150* |
| *13C3 PFBS* | *101* | | *25 - 150* |
| *18O2 PFHxS* | *87* | | *25 - 150* |
| *13C4 PFOS* | *94* | | *25 - 150* |
| *13C8 FOSA* | *91* | | *10 - 150* |
| *M2-4:2 FTS* | *98* | | *25 - 150* |
| *M2-6:2 FTS* | *109* | | *25 - 150* |
| *M2-8:2 FTS* | *109* | | *25 - 150* |
| *13C2 10:2 FTS* | *113* | | *25 - 150* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* |
| *d3-NMeFOSAA* | *92* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487630/2-A**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *94* | | *25 - 150* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* |
| *d-N-EtFOSA-M* | *82* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *100* | | *10 - 150* |

**Lab Sample ID: 320-73356-1 MS**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: PUB-MS01-050421**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.2 | | 33.7 | 44.5 | | ng/L | | 108 | 70 - 130 |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 33.7 | 36.2 | | ng/L | | 99 | 70 - 130 |
| Perfluorohexanoic acid (PFHxA) | 2.5 | | 33.7 | 39.8 | | ng/L | | 111 | 70 - 130 |
| Perfluoroheptanoic acid (PFHpA) | 2.4 | | 33.7 | 41.7 | | ng/L | | 117 | 70 - 130 |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 33.7 | 36.4 | | ng/L | | 102 | 70 - 130 |
| Perfluorononanoic acid (PFNA) | ND | | 33.7 | 34.3 | | ng/L | | 102 | 70 - 130 |
| Perfluorodecanoic acid (PFDA) | ND | | 33.7 | 37.8 | | ng/L | | 112 | 70 - 130 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 33.7 | 36.8 | | ng/L | | 109 | 70 - 130 |
| Perfluorododecanoic acid (PFDoA) | ND | | 33.7 | 34.6 | | ng/L | | 103 | 70 - 130 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 33.7 | 35.2 | | ng/L | | 104 | 70 - 130 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 33.7 | 36.4 | | ng/L | | 108 | 70 - 130 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 33.7 | 36.4 | | ng/L | | 108 | 70 - 130 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 33.7 | 39.9 | | ng/L | | 118 | 70 - 130 |
| Perfluorobutanesulfonic acid (PFBS) | 0.89 | J | 29.8 | 33.7 | | ng/L | | 110 | 70 - 130 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 31.6 | 32.9 | | ng/L | | 104 | 70 - 130 |
| Perfluorohexanesulfonic acid (PFHxS) | 2.7 | | 30.7 | 33.9 | | ng/L | | 102 | 70 - 130 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 32.1 | 30.9 | | ng/L | | 96 | 70 - 130 |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | I | 31.3 | 33.6 | | ng/L | | 101 | 70 - 130 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 32.3 | 30.8 | | ng/L | | 95 | 70 - 130 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 32.5 | 33.1 | | ng/L | | 102 | 70 - 130 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 32.6 | 30.6 | | ng/L | | 94 | 70 - 130 |
| Perfluorooctanesulfonamide (FOSA) | 3.6 | | 33.7 | 37.4 | | ng/L | | 100 | 70 - 130 |
| NMeFOSA | ND | | 33.7 | 36.4 | | ng/L | | 108 | 70 - 130 |
| NEtFOSA | ND | | 33.7 | 29.9 | | ng/L | | 89 | 70 - 130 |
| NMeFOSAA | ND | | 33.7 | 37.2 | | ng/L | | 111 | 70 - 130 |
| NEtFOSAA | ND | | 33.7 | 35.0 | | ng/L | | 104 | 70 - 130 |
| NMeFOSE | ND | | 33.7 | 35.4 | | ng/L | | 105 | 70 - 130 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73356-1 MS**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: PUB-MS01-050421**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | ND | | 33.7 | 35.3 | | ng/L | | 105 | 70 - 130 |
| 4:2 FTS | ND | | 31.5 | 33.0 | | ng/L | | 105 | 70 - 130 |
| 6:2 FTS | ND | | 31.9 | 37.8 | | ng/L | | 118 | 70 - 130 |
| 8:2 FTS | ND | | 32.3 | 37.6 | | ng/L | | 116 | 70 - 130 |
| 10:2 FTS | ND | | 32.5 | 32.1 | | ng/L | | 99 | 70 - 130 |
| HFPO-DA (GenX) | ND | | 33.7 | 35.9 | | ng/L | | 107 | 70 - 130 |
| F-53B Major | ND | | 31.4 | 32.2 | | ng/L | | 103 | 70 - 130 |
| F-53B Minor | ND | | 31.7 | 32.6 | | ng/L | | 103 | 70 - 130 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 31.7 | 32.6 | | ng/L | | 103 | 70 - 130 |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* |
| *13C5 PFPeA* | *75* | | *25 - 150* |
| *13C2 PFHxA* | *83* | | *25 - 150* |
| *13C4 PFHpA* | *76* | | *25 - 150* |
| *13C4 PFOA* | *80* | | *25 - 150* |
| *13C5 PFNA* | *82* | | *25 - 150* |
| *13C2 PFDA* | *77* | | *25 - 150* |
| *13C2 PFUnA* | *87* | | *25 - 150* |
| *13C2 PFDoA* | *82* | | *25 - 150* |
| *13C2 PFTeDA* | *75* | | *25 - 150* |
| *13C2 PFHxDA* | *82* | | *25 - 150* |
| *13C3 PFBS* | *76* | | *25 - 150* |
| *18O2 PFHxS* | *75* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *84* | | *10 - 150* |
| *M2-4:2 FTS* | *81* | | *25 - 150* |
| *M2-6:2 FTS* | *83* | | *25 - 150* |
| *M2-8:2 FTS* | *94* | | *25 - 150* |
| *13C2 10:2 FTS* | *98* | | *25 - 150* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* |
| *d3-NMeFOSAA* | *84* | | *25 - 150* |
| *d5-NEtFOSAA* | *85* | | *25 - 150* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *76* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *78* | | *10 - 150* |

**Lab Sample ID: 320-73356-1 MSD**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: PUB-MSD01-050421**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.2 | | 34.8 | 45.5 | | ng/L | | 107 | 70 - 130 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | 2.9 | | 34.8 | 36.1 | | ng/L | | 95 | 70 - 130 | 0 | 30 |
| Perfluorohexanoic acid (PFHxA) | 2.5 | | 34.8 | 41.6 | | ng/L | | 112 | 70 - 130 | 5 | 30 |
| Perfluoroheptanoic acid (PFHpA) | 2.4 | | 34.8 | 37.9 | | ng/L | | 102 | 70 - 130 | 10 | 30 |
| Perfluorooctanoic acid (PFOA) | 2.2 | | 34.8 | 38.6 | | ng/L | | 105 | 70 - 130 | 6 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73356-1 MSD**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: PUB-MSD01-050421**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 34.8 | 34.5 | | ng/L | | 99 | 70 - 130 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | ND | | 34.8 | 32.8 | | ng/L | | 94 | 70 - 130 | 14 | 30 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 34.8 | 37.5 | | ng/L | | 108 | 70 - 130 | 2 | 30 |
| Perfluorododecanoic acid (PFDoA) | ND | | 34.8 | 35.2 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 34.8 | 34.5 | | ng/L | | 99 | 70 - 130 | 2 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 34.8 | 40.5 | | ng/L | | 116 | 70 - 130 | 11 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 34.8 | 35.8 | | ng/L | | 103 | 70 - 130 | 2 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 34.8 | 42.7 | | ng/L | | 122 | 70 - 130 | 7 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | 0.89 | J | 30.8 | 33.9 | | ng/L | | 107 | 70 - 130 | 1 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 32.7 | 34.0 | | ng/L | | 104 | 70 - 130 | 3 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | 2.7 | | 31.7 | 34.0 | | ng/L | | 99 | 70 - 130 | 0 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 33.2 | 36.0 | | ng/L | | 109 | 70 - 130 | 15 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | I | 32.3 | 36.1 | | ng/L | | 105 | 70 - 130 | 7 | 30 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 33.4 | 33.9 | | ng/L | | 101 | 70 - 130 | 10 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 33.6 | 37.1 | | ng/L | | 111 | 70 - 130 | 11 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 33.7 | 33.3 | | ng/L | | 99 | 70 - 130 | 8 | 30 |
| Perfluorooctanesulfonamide (FOSA) | 3.6 | | 34.8 | 41.3 | | ng/L | | 108 | 70 - 130 | 10 | 30 |
| NMeFOSA | ND | | 34.8 | 40.1 | | ng/L | | 115 | 70 - 130 | 10 | 30 |
| NEtFOSA | ND | | 34.8 | 32.0 | | ng/L | | 92 | 70 - 130 | 7 | 30 |
| NMeFOSAA | ND | | 34.8 | 42.4 | | ng/L | | 122 | 70 - 130 | 13 | 30 |
| NEtFOSAA | ND | | 34.8 | 37.9 | | ng/L | | 109 | 70 - 130 | 8 | 30 |
| NMeFOSE | ND | | 34.8 | 39.8 | | ng/L | | 114 | 70 - 130 | 12 | 30 |
| NEtFOSE | ND | | 34.8 | 31.9 | | ng/L | | 92 | 70 - 130 | 10 | 30 |
| 4:2 FTS | ND | | 32.5 | 34.4 | | ng/L | | 106 | 70 - 130 | 4 | 30 |
| 6:2 FTS | ND | | 33.0 | 37.3 | | ng/L | | 113 | 70 - 130 | 1 | 30 |
| 8:2 FTS | ND | | 33.4 | 34.4 | | ng/L | | 103 | 70 - 130 | 9 | 30 |
| 10:2 FTS | ND | | 33.6 | 33.0 | | ng/L | | 98 | 70 - 130 | 3 | 30 |
| HFPO-DA (GenX) | ND | | 34.8 | 35.3 | | ng/L | | 101 | 70 - 130 | 2 | 30 |
| F-53B Major | ND | | 32.5 | 37.8 | | ng/L | | 116 | 70 - 130 | 16 | 30 |
| F-53B Minor | ND | | 32.8 | 34.9 | | ng/L | | 106 | 70 - 130 | 7 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 32.8 | 34.5 | | ng/L | | 105 | 70 - 130 | 6 | 30 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* |
| *13C5 PFPeA* | *76* | | *25 - 150* |
| *13C2 PFHxA* | *75* | | *25 - 150* |
| *13C4 PFHpA* | *77* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: 320-73356-1 MSD**
**Matrix: Water**
**Analysis Batch: 488059**

**Client Sample ID: PUB-MSD01-050421**
**Prep Type: Total/NA**
**Prep Batch: 487630**

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 13C4 PFOA | 74 | | 25 - 150 |
| 13C5 PFNA | 84 | | 25 - 150 |
| 13C2 PFDA | 78 | | 25 - 150 |
| 13C2 PFUnA | 84 | | 25 - 150 |
| 13C2 PFDoA | 82 | | 25 - 150 |
| 13C2 PFTeDA | 67 | | 25 - 150 |
| 13C2 PFHxDA | 80 | | 25 - 150 |
| 13C3 PFBS | 73 | | 25 - 150 |
| 18O2 PFHxS | 73 | | 25 - 150 |
| 13C4 PFOS | 76 | | 25 - 150 |
| 13C8 FOSA | 73 | | 10 - 150 |
| M2-4:2 FTS | 82 | | 25 - 150 |
| M2-6:2 FTS | 80 | | 25 - 150 |
| M2-8:2 FTS | 85 | | 25 - 150 |
| 13C2 10:2 FTS | 91 | | 25 - 150 |
| 13C3 HFPO-DA | 83 | | 25 - 150 |
| d3-NMeFOSAA | 73 | | 25 - 150 |
| d5-NEtFOSAA | 72 | | 25 - 150 |
| d-N-MeFOSA-M | 63 | | 10 - 150 |
| d-N-EtFOSA-M | 63 | | 10 - 150 |
| d7-N-MeFOSE-M | 73 | | 10 - 150 |
| d9-N-EtFOSE-M | 78 | | 10 - 150 |

## LCMS

### Prep Batch: 487630

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73356-1 | PUB1204-TN-050421-100 | Total/NA | Water | 3535 | |
| 320-73356-3 | PUB1207-TN-050421-100 | Total/NA | Water | 3535 | |
| 320-73356-5 | PUB1220-NN-050421-100 | Total/NA | Water | 3535 | |
| 320-73356-7 | PUB1214-TN-050521-100 | Total/NA | Water | 3535 | |
| 320-73356-9 | PUB-FD01-050521 | Total/NA | Water | 3535 | |
| 320-73356-10 | PUB1213-TN-050521-100 | Total/NA | Water | 3535 | |
| 320-73356-12 | PUB1212-TN-050521-100 | Total/NA | Water | 3535 | |
| 320-73356-14 | PUB1205-TN-050521-100 | Total/NA | Water | 3535 | |
| 320-73356-16 | PUB1206-TN-050521-100 | Total/NA | Water | 3535 | |
| 320-73356-18 | PUB1217-NN-050121-100 | Total/NA | Water | 3535 | |
| 320-73356-20 | PUB-FD01-050121 | Total/NA | Water | 3535 | |
| MB 320-487630/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-487630/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| 320-73356-1 MS | PUB-MS01-050421 | Total/NA | Water | 3535 | |
| 320-73356-1 MSD | PUB-MSD01-050421 | Total/NA | Water | 3535 | |

### Analysis Batch: 488059

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73356-1 | PUB1204-TN-050421-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-3 | PUB1207-TN-050421-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-5 | PUB1220-NN-050421-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-7 | PUB1214-TN-050521-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-9 | PUB-FD01-050521 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-10 | PUB1213-TN-050521-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-12 | PUB1212-TN-050521-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-14 | PUB1205-TN-050521-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-16 | PUB1206-TN-050521-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-18 | PUB1217-NN-050121-100 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-20 | PUB-FD01-050121 | Total/NA | Water | 537 (modified) | 487630 |
| MB 320-487630/1-A | Method Blank | Total/NA | Water | 537 (modified) | 487630 |
| LCS 320-487630/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-1 MS | PUB-MS01-050421 | Total/NA | Water | 537 (modified) | 487630 |
| 320-73356-1 MSD | PUB-MSD01-050421 | Total/NA | Water | 537 (modified) | 487630 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Client Sample ID: PUB1204-TN-050421-100
**Lab Sample ID: 320-73356-1**
**Date Collected: 05/04/21 09:21**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 288.9 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 21:37 | RS1 | TAL SAC |

## Client Sample ID: PUB1207-TN-050421-100
**Lab Sample ID: 320-73356-3**
**Date Collected: 05/04/21 14:30**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.4 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 22:05 | RS1 | TAL SAC |

## Client Sample ID: PUB1220-NN-050421-100
**Lab Sample ID: 320-73356-5**
**Date Collected: 05/04/21 15:34**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 293.9 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 22:15 | RS1 | TAL SAC |

## Client Sample ID: PUB1214-TN-050521-100
**Lab Sample ID: 320-73356-7**
**Date Collected: 05/05/21 09:14**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 286.2 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 22:24 | RS1 | TAL SAC |

## Client Sample ID: PUB-FD01-050521
**Lab Sample ID: 320-73356-9**
**Date Collected: 05/05/21 12:01**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 296.4 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 22:34 | RS1 | TAL SAC |

## Client Sample ID: PUB1213-TN-050521-100
**Lab Sample ID: 320-73356-10**
**Date Collected: 05/05/21 10:06**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 305.3 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 22:43 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Client Sample ID: PUB1212-TN-050521-100
**Lab Sample ID: 320-73356-12**
**Date Collected: 05/05/21 10:43**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.2 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 23:21 | RS1 | TAL SAC |

## Client Sample ID: PUB1205-TN-050521-100
**Lab Sample ID: 320-73356-14**
**Date Collected: 05/05/21 11:22**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.5 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 23:30 | RS1 | TAL SAC |

## Client Sample ID: PUB1206-TN-050521-100
**Lab Sample ID: 320-73356-16**
**Date Collected: 05/05/21 13:42**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.9 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 23:40 | RS1 | TAL SAC |

## Client Sample ID: PUB1217-NN-050121-100
**Lab Sample ID: 320-73356-18**
**Date Collected: 05/05/21 15:36**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 283.2 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 23:49 | RS1 | TAL SAC |

## Client Sample ID: PUB-FD01-050121
**Lab Sample ID: 320-73356-20**
**Date Collected: 05/05/21 12:01**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 288.2 mL | 10.0 mL | 487630 | 05/10/21 11:49 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488059 | 05/11/21 23:58 | RS1 | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73356-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73356-1 | PUB1204-TN-050421-100 | Water | 05/04/21 09:21 | 05/07/21 10:05 | |
| 320-73356-3 | PUB1207-TN-050421-100 | Water | 05/04/21 14:30 | 05/07/21 10:05 | |
| 320-73356-5 | PUB1220-NN-050421-100 | Water | 05/04/21 15:34 | 05/07/21 10:05 | |
| 320-73356-7 | PUB1214-TN-050521-100 | Water | 05/05/21 09:14 | 05/07/21 10:05 | |
| 320-73356-9 | PUB-FD01-050521 | Water | 05/05/21 12:01 | 05/07/21 10:05 | |
| 320-73356-10 | PUB1213-TN-050521-100 | Water | 05/05/21 10:06 | 05/07/21 10:05 | |
| 320-73356-12 | PUB1212-TN-050521-100 | Water | 05/05/21 10:43 | 05/07/21 10:05 | |
| 320-73356-14 | PUB1205-TN-050521-100 | Water | 05/05/21 11:22 | 05/07/21 10:05 | |
| 320-73356-16 | PUB1206-TN-050521-100 | Water | 05/05/21 13:42 | 05/07/21 10:05 | |
| 320-73356-18 | PUB1217-NN-050121-100 | Water | 05/05/21 15:36 | 05/07/21 10:05 | |
| 320-73356-20 | PUB-FD01-050121 | Water | 05/05/21 12:01 | 05/07/21 10:05 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/RAB/PAS | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531605.001 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704166 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73356 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PUB1204-TN-050421-100 | 5/4/2021 | 921 | G | Water | N | N | X | 2 | |
| PUB1204-TN-050421-200 | 5/4/2021 | 905 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB-MS01-050421 | 5/4/2021 | 921 | G | Water | N | N | X | 2 | Parent sample is: PUB1204-TN-050421-100 |
| PUB-MSD01-050421 | 5/4/2021 | 921 | G | Water | N | N | X | 2 | Parent sample is: PUB1204-TN-050421-100 |
| PUB1207-TN-050421-100 | 5/4/2021 | 1430 | G | Water | N | N | X | 2 | |
| PUB1207-TN-050421-200 | 5/4/2021 | 1412 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1220-NN-050421-100 | 5/4/2021 | 1534 | G | Water | N | N | X | 2 | |
| PUB1220-NN-050421-200 | 5/4/2021 | 1507 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1214-TN-050521-100 | 5/5/2021 | 914 | G | Water | N | N | X | 2 | |
| PUB1214-TN-050521-200 | 5/5/2021 | 858 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB-FD01-050521 | 5/5/2021 | 1201 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-6-2021 @13:30 | Wood | | 5/7/21 1005 | Eurofins |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1588098 / 1588099 / 1588096 / 1588097

Cooler Temperature(s) °C and Other Remarks: 0.6, 0.8

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB/PAS | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531605.002 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704166 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | | N | | |
| PUB1213-TN-050521-100 | 5/5/2021 | 1006 | G | Water | N | N | X | 2 | |
| PUB1213-TN-050521-200 | 5/5/2021 | 1008 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1212-TN-050521-100 | 5/5/2021 | 1043 | G | Water | N | N | X | 2 | |
| PUB1212-TN-050521-200 | 5/5/2021 | 1023 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1205-TN-050521-100 | 5/5/2021 | 1122 | G | Water | N | N | X | 2 | |
| PUB1205-TN-050521-200 | 5/5/2021 | 1057 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1206-TN-050521-100 | 5/5/2021 | 1342 | G | Water | N | N | X | 2 | |
| PUB1206-TN-050521-200 | 5/5/2021 | 1305 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1217-NN-050121-100 | 5/5/2021 | 1536 | G | Water | N | N | X | 2 | |
| PUB1217-NN-050121-200 | 5/5/2021 | 1519 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PUB-FD01-050121 | 5/5/2021 | 1201 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 5-6-2021 @ 13:30 | Wood | | 5/7/21 1005 | Eurofins |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1588898 / 1588891 / 1588856 / 1588897

Cooler Temperature(s) °C and Other Remarks: 0.6, 0.8

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73356-1

**Login Number: 73356**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1588896/1588897/1588898/1588899 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73358-1
Client Project/Site: WDNR - Campbell WI

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/14/2021 1:45:41 PM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-73358-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73358-1**

**Receipt**
The samples were received on 5/7/2021 10:05 AM. 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 0.7º C and 0.9º C.

**LCMS**
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-487829.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Client Sample ID: PWS1192-OS-050421-100 — Lab Sample ID: 320-73358-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 11 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 7.7 | | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 11 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.24 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 0.66 | J | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1149-OS-050421-100 — Lab Sample ID: 320-73358-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.8 | 0.78 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.82 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.37 | J | 1.8 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.6 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.21 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 9.6 | | 1.8 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.0 | J | 1.8 | 0.90 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1128-OS-050421-100 — Lab Sample ID: 320-73358-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.3 | J | 4.5 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.73 | J | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.93 | J | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.65 | J | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 19 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.0 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.19 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.6 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 3.7 | | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1087-OS-050421-100 — Lab Sample ID: 320-73358-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.7 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.56 | J | 1.7 | 0.43 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.62 | J | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.32 | J | 1.7 | 0.22 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 0.99 | J | 1.7 | 0.74 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.6 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.29 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.8 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.5 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Client Sample ID: PWS1140-OS-050421-100 — Lab Sample ID: 320-73358-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.72 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.70 | J | 1.9 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.9 | I | 1.9 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.9 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1171-IS-050421-100 — Lab Sample ID: 320-73358-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.23 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.0 | | 1.8 | 0.91 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1148-IS-050521-100 — Lab Sample ID: 320-73358-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.6 | J | 4.4 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.4 | J | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.53 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.5 | J | 1.8 | 0.51 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 1.1 | J I | 1.8 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1166-OS-050521-100 — Lab Sample ID: 320-73358-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.2 | | 4.6 | 2.2 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 6.8 | | 1.8 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 6.8 | | 1.8 | 0.53 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 8.8 | | 1.8 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 9.3 | | 1.8 | 0.77 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 9.0 | | 1.8 | 0.18 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.43 | J | 1.8 | 0.27 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.1 | | 1.8 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.19 | J | 1.8 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.4 | | 1.8 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.92 | J | 1.8 | 0.89 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1192-OS-050421-100**
**Date Collected: 05/05/21 10:20**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-1**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.3 | 2.1 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.73 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **11** | | 1.7 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **7.7** | | 1.7 | 0.26 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **11** | | 1.7 | 0.49 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.24** | **J** | 1.7 | 0.16 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **0.66** | **J** | 1.7 | 0.46 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.84 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/11/21 04:34 | 05/12/21 07:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:56* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:56* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:56* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:56* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:56* | *1* |

## Client Sample ID: PWS1192-OS-050421-100

**Lab Sample ID: 320-73358-1**

**Date Collected: 05/05/21 10:20**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 98 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 PFDA | 93 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 PFUnA | 99 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 PFDoA | 92 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 PFTeDA | 76 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 PFHxDA | 95 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C3 PFBS | 93 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 18O2 PFHxS | 99 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C4 PFOS | 94 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C8 FOSA | 108 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| M2-4:2 FTS | 130 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| M2-6:2 FTS | 124 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C2 10:2 FTS | 101 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| 13C3 HFPO-DA | 85 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d3-NMeFOSAA | 98 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d5-NEtFOSAA | 102 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d-N-EtFOSA-M | 80 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d7-N-MeFOSE-M | 81 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:56 | 1 |

## Client Sample ID: PWS1149-OS-050421-100

**Lab Sample ID: 320-73358-3**

**Date Collected: 05/05/21 11:30**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.6 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.54 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.8 | 0.78 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.82** | **J** | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.37** | **J** | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.6** | | 1.8 | 0.53 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.21** | **J** | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1149-OS-050421-100**
**Date Collected: 05/05/21 11:30**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **9.6** | | 1.8 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.0** | **J** | 1.8 | 0.90 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| NEtFOSE | ND | | 1.8 | 0.78 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 08:06 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFTeDA* | *84* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *18O2 PFHxS* | *99* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C4 PFOS* | *98* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C8 FOSA* | *109* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *M2-4:2 FTS* | *120* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *M2-6:2 FTS* | *125* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *M2-8:2 FTS* | *113* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C2 10:2 FTS* | *100* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d3-NMeFOSAA* | *96* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d5-NEtFOSAA* | *108* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d-N-MeFOSA-M* | *85* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d-N-EtFOSA-M* | *76* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d7-N-MeFOSE-M* | *91* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |
| *d9-N-EtFOSE-M* | *91* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:06* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1128-OS-050421-100**
**Date Collected: 05/05/21 13:30**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-5**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.3** | **J** | 4.5 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.73** | **J** | 1.8 | 0.45 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.93** | **J** | 1.8 | 0.53 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.65** | **J** | 1.8 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.8 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.85 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **19** | | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.0** | | 1.8 | 0.52 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.19** | **J** | 1.8 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.6** | | 1.8 | 0.49 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **3.7** | | 1.8 | 0.89 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NMeFOSAA | ND | | 4.5 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NEtFOSAA | ND | | 4.5 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 6:2 FTS | ND | | 4.5 | 2.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/11/21 04:34 | 05/12/21 08:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:15* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:15* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:15* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:15* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:15* | *1* |

## Client Sample ID: PWS1128-OS-050421-100

**Lab Sample ID: 320-73358-5**

**Date Collected: 05/05/21 13:30**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 95 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 PFDA | 94 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 PFDoA | 83 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 PFTeDA | 88 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 PFHxDA | 96 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 18O2 PFHxS | 98 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C4 PFOS | 96 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C8 FOSA | 105 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| M2-4:2 FTS | 108 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| M2-6:2 FTS | 114 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| M2-8:2 FTS | 109 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C2 10:2 FTS | 100 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d3-NMeFOSAA | 107 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d5-NEtFOSAA | 97 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d-N-MeFOSA-M | 80 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d-N-EtFOSA-M | 73 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d7-N-MeFOSE-M | 90 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:15 | 1 |

## Client Sample ID: PWS1087-OS-050421-100

**Lab Sample ID: 320-73358-7**

**Date Collected: 05/05/21 16:22**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.7** | | 4.3 | 2.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.56** | **J** | 1.7 | 0.43 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.62** | **J** | 1.7 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.32** | **J** | 1.7 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **0.99** | **J** | 1.7 | 0.74 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.96 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.48 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.64 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.82 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.6** | **J** | 1.7 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.29** | **J** | 1.7 | 0.26 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.8** | | 1.7 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1087-OS-050421-100**
**Date Collected: 05/05/21 16:22**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-7**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.5** | | 1.7 | 0.47 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.84 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.85 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NEtFOSA | ND | | 1.7 | 0.76 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NMeFOSE | ND | | 3.5 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| NEtFOSE | ND | | 1.7 | 0.74 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| HFPO-DA (GenX) | ND | | 3.5 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.35 | ng/L | | 05/11/21 04:34 | 05/12/21 08:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFHxA* | *79* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C4 PFHpA* | *81* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C4 PFOA* | *86* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C5 PFNA* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFDA* | *76* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFDoA* | *86* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFTeDA* | *73* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 PFHxDA* | *83* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C3 PFBS* | *81* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *18O2 PFHxS* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C4 PFOS* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *M2-4:2 FTS* | *93* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *M2-6:2 FTS* | *108* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C2 10:2 FTS* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *13C3 HFPO-DA* | *74* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d5-NEtFOSAA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d-N-EtFOSA-M* | *67* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d7-N-MeFOSE-M* | *77* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 08:24* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1140-OS-050421-100**
**Date Collected: 05/05/21 17:10**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-9**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.54 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.51 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.68 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.83 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.88 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.72** | **J** | 1.9 | 0.19 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.70** | **J** | 1.9 | 0.53 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.9** | **I** | 1.9 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.9 | 0.91 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NMeFOSA | ND | | 1.9 | 0.40 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NEtFOSA | ND | | 1.9 | 0.81 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| NEtFOSE | ND | | 1.9 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.3 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| F-53B Major | ND | | 1.9 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 08:33 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:33* | *1* |
| *13C5 PFPeA* | *81* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:33* | *1* |
| *13C2 PFHxA* | *82* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:33* | *1* |
| *13C4 PFHpA* | *79* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:33* | *1* |
| *13C4 PFOA* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 08:33* | *1* |

## Client Sample ID: PWS1140-OS-050421-100

**Lab Sample ID: 320-73358-9**

**Date Collected: 05/05/21 17:10**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 86 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 PFDA | 81 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 PFUnA | 90 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 PFDoA | 86 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 PFTeDA | 75 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C3 PFBS | 79 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 18O2 PFHxS | 87 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C4 PFOS | 87 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C8 FOSA | 92 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| M2-4:2 FTS | 103 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C2 10:2 FTS | 88 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| 13C3 HFPO-DA | 76 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d3-NMeFOSAA | 92 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d5-NEtFOSAA | 94 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d-N-EtFOSA-M | 68 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d7-N-MeFOSE-M | 75 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 08:33 | 1 |

## Client Sample ID: PWS1171-IS-050421-100

**Lab Sample ID: 320-73358-11**

**Date Collected: 05/05/21 18:25**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.6 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.45 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.54 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.51 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.67 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.82 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.87 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.23** | **J** | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.8 | 0.53 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.8 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1171-IS-050421-100**
**Date Collected: 05/05/21 18:25**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-11**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.90 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.0** | | 1.8 | 0.91 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NMeFOSA | ND | | 1.8 | 0.40 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NEtFOSA | ND | | 1.8 | 0.80 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NMeFOSE | ND | | 3.7 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| NEtFOSE | ND | | 1.8 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.43 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.62 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| HFPO-DA (GenX) | ND | | 3.7 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| F-53B Minor | ND | | 1.8 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 09:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *82* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C4 PFHpA* | *84* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C5 PFNA* | *91* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFDA* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFDoA* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFTeDA* | *75* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 PFHxDA* | *84* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *18O2 PFHxS* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C8 FOSA* | *94* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *M2-4:2 FTS* | *109* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *M2-6:2 FTS* | *119* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *M2-8:2 FTS* | *112* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C2 10:2 FTS* | *97* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d3-NMeFOSAA* | *96* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d5-NEtFOSAA* | *99* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d7-N-MeFOSE-M* | *80* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |
| *d9-N-EtFOSE-M* | *75* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:09* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1148-IS-050521-100**
**Date Collected: 05/05/21 15:35**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-13**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.6** | **J** | 4.4 | 2.1 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.8 | 0.44 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.8 | 0.51 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.8 | 0.75 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.24 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 0.98 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.49 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.65 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.83 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.4** | **J** | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.53** | **J** | 1.8 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.5** | **J** | 1.8 | 0.51 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.8 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **1.1** | **J I** | 1.8 | 0.48 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.33 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.86 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.8 | 0.87 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NMeFOSA | ND | | 1.8 | 0.38 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NEtFOSA | ND | | 1.8 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NMeFOSAA | ND | | 4.4 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NEtFOSAA | ND | | 4.4 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NMeFOSE | ND | | 3.6 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| NEtFOSE | ND | | 1.8 | 0.75 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 6:2 FTS | ND | | 4.4 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.41 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.59 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| F-53B Major | ND | | 1.8 | 0.21 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| F-53B Minor | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/11/21 04:34 | 05/12/21 09:20 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *88* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:20* | *1* |
| *13C5 PFPeA* | *93* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:20* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:20* | *1* |
| *13C4 PFHpA* | *89* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:20* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:20* | *1* |

## Client Sample ID: PWS1148-IS-050521-100

**Lab Sample ID: 320-73358-13**

**Date Collected: 05/05/21 15:35**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 96 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 PFDA | 85 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 PFUnA | 101 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 PFDoA | 87 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 PFHxDA | 87 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C3 PFBS | 88 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C8 FOSA | 102 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| M2-4:2 FTS | 108 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| M2-6:2 FTS | 110 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C2 10:2 FTS | 97 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| 13C3 HFPO-DA | 85 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d3-NMeFOSAA | 85 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d5-NEtFOSAA | 96 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d-N-MeFOSA-M | 78 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d7-N-MeFOSE-M | 82 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 09:20 | 1 |

## Client Sample ID: PWS1166-OS-050521-100

**Lab Sample ID: 320-73358-15**

**Date Collected: 05/05/21 18:23**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.2** | | 4.6 | 2.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **6.8** | | 1.8 | 0.45 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **6.8** | | 1.8 | 0.53 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **8.8** | | 1.8 | 0.23 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **9.3** | | 1.8 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.8 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.8 | 0.28 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.8 | 1.0 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.8 | 0.50 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.8 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.8 | 0.66 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.8 | 0.81 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.8 | 0.86 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **9.0** | | 1.8 | 0.18 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.43** | **J** | 1.8 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.1** | | 1.8 | 0.52 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.19** | **J** | 1.8 | 0.17 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

**Client Sample ID: PWS1166-OS-050521-100**
**Date Collected: 05/05/21 18:23**
**Date Received: 05/07/21 10:05**

**Lab Sample ID: 320-73358-15**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.4** | | 1.8 | 0.49 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.8 | 0.34 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.8 | 0.88 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.92** | **J** | 1.8 | 0.89 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NMeFOSA | ND | | 1.8 | 0.39 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NEtFOSA | ND | | 1.8 | 0.79 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NMeFOSAA | ND | | 4.6 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NEtFOSAA | ND | | 4.6 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NMeFOSE | ND | | 3.6 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| NEtFOSE | ND | | 1.8 | 0.77 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| 4:2 FTS | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| 6:2 FTS | ND | | 4.6 | 2.3 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| 8:2 FTS | ND | | 1.8 | 0.42 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| 10:2 FTS | ND | | 1.8 | 0.61 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| HFPO-DA (GenX) | ND | | 3.6 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| F-53B Major | ND | | 1.8 | 0.22 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| F-53B Minor | ND | | 1.8 | 0.29 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.8 | 0.36 | ng/L | | 05/11/21 04:34 | 05/12/21 09:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C5 PFPeA* | *92* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *18O2 PFHxS* | *97* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C4 PFOS* | *94* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *M2-4:2 FTS* | *123* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *M2-6:2 FTS* | *121* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *M2-8:2 FTS* | *105* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C2 10:2 FTS* | *100* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d3-NMeFOSAA* | *102* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d5-NEtFOSAA* | *104* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d-N-MeFOSA-M* | *87* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d-N-EtFOSA-M* | *82* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |
| *d9-N-EtFOSE-M* | *88* | | *10 - 150* | *05/11/21 04:34* | *05/12/21 09:29* | *1* |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFBA | PFPeA | PFHxA | C4PFHA | PFOA | PFNA | PFDA | PFUnA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) |
| 320-73358-1 | PWS1192-OS-050421-100 | 82 | 89 | 92 | 95 | 96 | 98 | 93 | 99 |
| 320-73358-3 | PWS1149-OS-050421-100 | 86 | 94 | 93 | 95 | 99 | 99 | 97 | 102 |
| 320-73358-5 | PWS1128-OS-050421-100 | 91 | 92 | 92 | 92 | 94 | 95 | 94 | 100 |
| 320-73358-7 | PWS1087-OS-050421-100 | 75 | 81 | 79 | 81 | 86 | 85 | 76 | 91 |
| 320-73358-9 | PWS1140-OS-050421-100 | 77 | 81 | 82 | 79 | 85 | 86 | 81 | 90 |
| 320-73358-11 | PWS1171-IS-050421-100 | 82 | 86 | 85 | 84 | 89 | 91 | 87 | 89 |
| 320-73358-13 | PWS1148-IS-050521-100 | 88 | 93 | 89 | 89 | 98 | 96 | 85 | 101 |
| 320-73358-15 | PWS1166-OS-050521-100 | 85 | 92 | 87 | 94 | 94 | 100 | 94 | 102 |
| LCS 320-487829/2-A | Lab Control Sample | 89 | 96 | 92 | 91 | 93 | 100 | 86 | 105 |
| LCSD 320-487829/3-A | Lab Control Sample Dup | 92 | 92 | 92 | 96 | 102 | 96 | 96 | 107 |
| MB 320-487829/1-A | Method Blank | 93 | 100 | 97 | 97 | 102 | 101 | 100 | 109 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFDoA | PFTDA | PFHxDA | C3PFBS | PFHxS | PFOS | PFOSA | M242FTS |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (25-150) |
| 320-73358-1 | PWS1192-OS-050421-100 | 92 | 76 | 95 | 93 | 99 | 94 | 108 | 130 |
| 320-73358-3 | PWS1149-OS-050421-100 | 87 | 84 | 93 | 94 | 99 | 98 | 109 | 120 |
| 320-73358-5 | PWS1128-OS-050421-100 | 83 | 88 | 96 | 87 | 98 | 96 | 105 | 108 |
| 320-73358-7 | PWS1087-OS-050421-100 | 86 | 73 | 83 | 81 | 85 | 85 | 95 | 93 |
| 320-73358-9 | PWS1140-OS-050421-100 | 86 | 75 | 82 | 79 | 87 | 87 | 92 | 103 |
| 320-73358-11 | PWS1171-IS-050421-100 | 85 | 75 | 84 | 84 | 87 | 90 | 94 | 109 |
| 320-73358-13 | PWS1148-IS-050521-100 | 87 | 78 | 87 | 88 | 91 | 90 | 102 | 108 |
| 320-73358-15 | PWS1166-OS-050521-100 | 94 | 87 | 98 | 94 | 97 | 94 | 103 | 123 |
| LCS 320-487829/2-A | Lab Control Sample | 91 | 82 | 94 | 92 | 102 | 100 | 100 | 103 |
| LCSD 320-487829/3-A | Lab Control Sample Dup | 96 | 85 | 94 | 92 | 96 | 91 | 100 | 112 |
| MB 320-487829/1-A | Method Blank | 93 | 88 | 92 | 91 | 101 | 95 | 103 | 119 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | M262FTS | M282FTS | M102FTS | HFPODA | d3NMFOS | d5NEFOS | dMeFOSA | dEtFOSA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (10-150) |
| 320-73358-1 | PWS1192-OS-050421-100 | 124 | 102 | 101 | 85 | 98 | 102 | 81 | 80 |
| 320-73358-3 | PWS1149-OS-050421-100 | 125 | 113 | 100 | 86 | 96 | 108 | 85 | 76 |
| 320-73358-5 | PWS1128-OS-050421-100 | 114 | 109 | 100 | 86 | 107 | 97 | 80 | 73 |
| 320-73358-7 | PWS1087-OS-050421-100 | 108 | 91 | 87 | 74 | 94 | 94 | 68 | 67 |
| 320-73358-9 | PWS1140-OS-050421-100 | 102 | 102 | 88 | 76 | 92 | 94 | 71 | 68 |
| 320-73358-11 | PWS1171-IS-050421-100 | 119 | 112 | 97 | 83 | 96 | 99 | 73 | 68 |
| 320-73358-13 | PWS1148-IS-050521-100 | 110 | 103 | 97 | 85 | 85 | 96 | 78 | 77 |
| 320-73358-15 | PWS1166-OS-050521-100 | 121 | 105 | 100 | 88 | 102 | 104 | 87 | 82 |
| LCS 320-487829/2-A | Lab Control Sample | 120 | 104 | 104 | 86 | 103 | 104 | 80 | 78 |
| LCSD 320-487829/3-A | Lab Control Sample Dup | 113 | 106 | 101 | 89 | 113 | 105 | 75 | 73 |
| MB 320-487829/1-A | Method Blank | 116 | 124 | 110 | 91 | 111 | 106 | 78 | 79 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NMFM | NEFM | | | | | | |
| Lab Sample ID | Client Sample ID | (10-150) | (10-150) | | | | | | |
| 320-73358-1 | PWS1192-OS-050421-100 | 81 | 82 | | | | | | |
| 320-73358-3 | PWS1149-OS-050421-100 | 91 | 91 | | | | | | |
| 320-73358-5 | PWS1128-OS-050421-100 | 90 | 84 | | | | | | |
| 320-73358-7 | PWS1087-OS-050421-100 | 77 | 80 | | | | | | |
| 320-73358-9 | PWS1140-OS-050421-100 | 75 | 82 | | | | | | |
| 320-73358-11 | PWS1171-IS-050421-100 | 80 | 75 | | | | | | |
| 320-73358-13 | PWS1148-IS-050521-100 | 82 | 81 | | | | | | |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73358-1
Project/Site: WDNR - Campbell WI

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| 320-73358-15 | PWS1166-OS-050521-100 | 85 | 88 | | | | | | | | |
| LCS 320-487829/2-A | Lab Control Sample | 88 | 89 | | | | | | | | |
| LCSD 320-487829/3-A | Lab Control Sample Dup | 86 | 89 | | | | | | | | |
| MB 320-487829/1-A | Method Blank | 86 | 87 | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-487829/1-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/11/21 04:34 | 05/12/21 07:11 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |
| *13C5 PFPeA* | *100* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/11/21 04:34* | *05/12/21 07:11* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-487829/1-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 100 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C2 PFUnA | 109 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C2 PFTeDA | 88 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C2 PFHxDA | 92 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 18O2 PFHxS | 101 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C4 PFOS | 95 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C8 FOSA | 103 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| M2-4:2 FTS | 119 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| M2-6:2 FTS | 116 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| M2-8:2 FTS | 124 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C2 10:2 FTS | 110 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d3-NMeFOSAA | 111 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d5-NEtFOSAA | 106 | | 25 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d-N-MeFOSA-M | 78 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d7-N-MeFOSE-M | 86 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |
| d9-N-EtFOSE-M | 87 | | 10 - 150 | 05/11/21 04:34 | 05/12/21 07:11 | 1 |

**Lab Sample ID: LCS 320-487829/2-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 42.2 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 32.7 | | ng/L | | 82 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 46.5 | | ng/L | | 116 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 45.6 | | ng/L | | 114 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 41.0 | | ng/L | | 103 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 34.2 | | ng/L | | 97 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 42.2 | | ng/L | | 113 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 33.6 | | ng/L | | 92 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487829/2-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.3 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.3 | | ng/L | | 98 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 38.3 | | ng/L | | 100 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 36.6 | | ng/L | | 95 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.3 | | ng/L | | 104 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| NMeFOSA | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| NEtFOSA | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| NMeFOSAA | 40.0 | 46.5 | | ng/L | | 116 | 60 - 135 |
| NEtFOSAA | 40.0 | 35.8 | | ng/L | | 90 | 60 - 135 |
| NMeFOSE | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 |
| NEtFOSE | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 |
| 4:2 FTS | 37.4 | 38.0 | | ng/L | | 102 | 60 - 135 |
| 6:2 FTS | 37.9 | 34.1 | | ng/L | | 90 | 60 - 135 |
| 8:2 FTS | 38.3 | 40.9 | | ng/L | | 107 | 60 - 135 |
| 10:2 FTS | 38.6 | 38.7 | | ng/L | | 100 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 45.0 | | ng/L | | 112 | 60 - 135 |
| F-53B Major | 37.3 | 34.3 | | ng/L | | 92 | 60 - 135 |
| F-53B Minor | 37.7 | 33.6 | | ng/L | | 89 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 35.7 | | ng/L | | 95 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* |
| *13C5 PFPeA* | *96* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *91* | | *25 - 150* |
| *13C4 PFOA* | *93* | | *25 - 150* |
| *13C5 PFNA* | *100* | | *25 - 150* |
| *13C2 PFDA* | *86* | | *25 - 150* |
| *13C2 PFUnA* | *105* | | *25 - 150* |
| *13C2 PFDoA* | *91* | | *25 - 150* |
| *13C2 PFTeDA* | *82* | | *25 - 150* |
| *13C2 PFHxDA* | *94* | | *25 - 150* |
| *13C3 PFBS* | *92* | | *25 - 150* |
| *18O2 PFHxS* | *102* | | *25 - 150* |
| *13C4 PFOS* | *100* | | *25 - 150* |
| *13C8 FOSA* | *100* | | *10 - 150* |
| *M2-4:2 FTS* | *103* | | *25 - 150* |
| *M2-6:2 FTS* | *120* | | *25 - 150* |
| *M2-8:2 FTS* | *104* | | *25 - 150* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* |
| *d3-NMeFOSAA* | *103* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-487829/2-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *104* | | *25 - 150* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* |
| *d-N-EtFOSA-M* | *78* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* |

**Lab Sample ID: LCSD 320-487829/3-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 43.9 | | ng/L | | 110 | 60 - 135 | 4 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 | 3 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 | 5 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 | 6 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 43.0 | | ng/L | | 108 | 60 - 135 | 3 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 38.6 | | ng/L | | 96 | 60 - 135 | 7 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 30.9 | | ng/L | | 77 | 60 - 135 | 6 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 | 15 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 | 11 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 | 6 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 34.9 | | ng/L | | 99 | 60 - 135 | 2 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 42.1 | | ng/L | | 112 | 60 - 135 | 0 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 35.3 | | ng/L | | 97 | 60 - 135 | 5 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 43.4 | | ng/L | | 114 | 60 - 135 | 7 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 40.2 | | ng/L | | 108 | 60 - 135 | 10 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 40.7 | | ng/L | | 106 | 60 - 135 | 6 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 39.5 | | ng/L | | 102 | 60 - 135 | 8 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 41.7 | | ng/L | | 108 | 60 - 135 | 3 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 40.6 | | ng/L | | 101 | 60 - 135 | 4 | 30 |
| NMeFOSA | | | 40.0 | 47.8 | | ng/L | | 119 | 60 - 135 | 8 | 30 |
| NEtFOSA | | | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 | 4 | 30 |
| NMeFOSAA | | | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 | 12 | 30 |
| NEtFOSAA | | | 40.0 | 36.0 | | ng/L | | 90 | 60 - 135 | 1 | 30 |
| NMeFOSE | | | 40.0 | 46.7 | | ng/L | | 117 | 60 - 135 | 5 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-487829/3-A**
**Matrix: Water**
**Analysis Batch: 488140**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 487829**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | | | 40.0 | 40.5 | | ng/L | | 101 | 60 - 135 | 0 | 30 |
| 4:2 FTS | | | 37.4 | 36.4 | | ng/L | | 97 | 60 - 135 | 4 | 30 |
| 6:2 FTS | | | 37.9 | 38.3 | | ng/L | | 101 | 60 - 135 | 12 | 30 |
| 8:2 FTS | | | 38.3 | 38.9 | | ng/L | | 102 | 60 - 135 | 5 | 30 |
| 10:2 FTS | | | 38.6 | 38.7 | | ng/L | | 100 | 60 - 135 | 0 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 47.3 | | ng/L | | 118 | 60 - 135 | 5 | 30 |
| F-53B Major | | | 37.3 | 37.6 | | ng/L | | 101 | 60 - 135 | 9 | 30 |
| F-53B Minor | | | 37.7 | 37.7 | | ng/L | | 100 | 60 - 135 | 11 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 42.6 | | ng/L | | 113 | 60 - 135 | 18 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* |
| *13C5 PFPeA* | *92* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *96* | | *25 - 150* |
| *13C4 PFOA* | *102* | | *25 - 150* |
| *13C5 PFNA* | *96* | | *25 - 150* |
| *13C2 PFDA* | *96* | | *25 - 150* |
| *13C2 PFUnA* | *107* | | *25 - 150* |
| *13C2 PFDoA* | *96* | | *25 - 150* |
| *13C2 PFTeDA* | *85* | | *25 - 150* |
| *13C2 PFHxDA* | *94* | | *25 - 150* |
| *13C3 PFBS* | *92* | | *25 - 150* |
| *18O2 PFHxS* | *96* | | *25 - 150* |
| *13C4 PFOS* | *91* | | *25 - 150* |
| *13C8 FOSA* | *100* | | *10 - 150* |
| *M2-4:2 FTS* | *112* | | *25 - 150* |
| *M2-6:2 FTS* | *113* | | *25 - 150* |
| *M2-8:2 FTS* | *106* | | *25 - 150* |
| *13C2 10:2 FTS* | *101* | | *25 - 150* |
| *13C3 HFPO-DA* | *89* | | *25 - 150* |
| *d3-NMeFOSAA* | *113* | | *25 - 150* |
| *d5-NEtFOSAA* | *105* | | *25 - 150* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *86* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* |

## LCMS

### Prep Batch: 487829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73358-1 | PWS1192-OS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-3 | PWS1149-OS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-5 | PWS1128-OS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-7 | PWS1087-OS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-9 | PWS1140-OS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-11 | PWS1171-IS-050421-100 | Total/NA | Water | 3535 | |
| 320-73358-13 | PWS1148-IS-050521-100 | Total/NA | Water | 3535 | |
| 320-73358-15 | PWS1166-OS-050521-100 | Total/NA | Water | 3535 | |
| MB 320-487829/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-487829/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-487829/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 488140

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73358-1 | PWS1192-OS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-3 | PWS1149-OS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-5 | PWS1128-OS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-7 | PWS1087-OS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-9 | PWS1140-OS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-11 | PWS1171-IS-050421-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-13 | PWS1148-IS-050521-100 | Total/NA | Water | 537 (modified) | 487829 |
| 320-73358-15 | PWS1166-OS-050521-100 | Total/NA | Water | 537 (modified) | 487829 |
| MB 320-487829/1-A | Method Blank | Total/NA | Water | 537 (modified) | 487829 |
| LCS 320-487829/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 487829 |
| LCSD 320-487829/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 487829 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Client Sample ID: PWS1192-OS-050421-100
**Lab Sample ID: 320-73358-1**
**Date Collected: 05/05/21 10:20**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 291.3 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 07:56 | K1S | TAL SAC |

## Client Sample ID: PWS1149-OS-050421-100
**Lab Sample ID: 320-73358-3**
**Date Collected: 05/05/21 11:30**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.9 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 08:06 | K1S | TAL SAC |

## Client Sample ID: PWS1128-OS-050421-100
**Lab Sample ID: 320-73358-5**
**Date Collected: 05/05/21 13:30**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 275 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 08:15 | K1S | TAL SAC |

## Client Sample ID: PWS1087-OS-050421-100
**Lab Sample ID: 320-73358-7**
**Date Collected: 05/05/21 16:22**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.4 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 08:24 | K1S | TAL SAC |

## Client Sample ID: PWS1140-OS-050421-100
**Lab Sample ID: 320-73358-9**
**Date Collected: 05/05/21 17:10**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.9 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 08:33 | K1S | TAL SAC |

## Client Sample ID: PWS1171-IS-050421-100
**Lab Sample ID: 320-73358-11**
**Date Collected: 05/05/21 18:25**
**Matrix: Water**
**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 270.5 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 09:09 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

## Client Sample ID: PWS1148-IS-050521-100

**Lab Sample ID: 320-73358-13**

**Date Collected: 05/05/21 15:35**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 281.6 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 09:20 | K1S | TAL SAC |

## Client Sample ID: PWS1166-OS-050521-100

**Lab Sample ID: 320-73358-15**

**Date Collected: 05/05/21 18:23**

**Matrix: Water**

**Date Received: 05/07/21 10:05**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.6 mL | 10.00 mL | 487829 | 05/11/21 04:34 | NSS | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 488140 | 05/12/21 09:29 | K1S | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73358-1
Project/Site: WDNR - Campbell WI

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell WI

Job ID: 320-73358-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73358-1 | PWS1192-OS-050421-100 | Water | 05/05/21 10:20 | 05/07/21 10:05 | |
| 320-73358-3 | PWS1149-OS-050421-100 | Water | 05/05/21 11:30 | 05/07/21 10:05 | |
| 320-73358-5 | PWS1128-OS-050421-100 | Water | 05/05/21 13:30 | 05/07/21 10:05 | |
| 320-73358-7 | PWS1087-OS-050421-100 | Water | 05/05/21 16:22 | 05/07/21 10:05 | |
| 320-73358-9 | PWS1140-OS-050421-100 | Water | 05/05/21 17:10 | 05/07/21 10:05 | |
| 320-73358-11 | PWS1171-IS-050421-100 | Water | 05/05/21 18:25 | 05/07/21 10:05 | |
| 320-73358-13 | PWS1148-IS-050521-100 | Water | 05/05/21 15:35 | 05/07/21 10:05 | |
| 320-73358-15 | PWS1166-OS-050521-100 | Water | 05/05/21 18:23 | 05/07/21 10:05 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.040 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73358 Chain of Custody

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | N | N | | |
| PWS1192-OS-050421-100 | 5/4/2021 | 1020 | G | Water | N | N | X | 2 | |
| PWS1192-OS-050421-200 | 5/4/2021 | 1005 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1149-OS-050421-100 | 5/4/2021 | 1130 | G | Water | N | N | X | 2 | |
| PWS1149-OS-050421-200 | 5/4/2021 | 1109 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1128-OS-050421-100 | 5/4/2021 | 1330 | G | Water | N | N | X | 2 | |
| PWS1128-OS-050421-200 | 5/4/2021 | 1312 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1087-OS-050421-100 | 5/4/2021 | 1622 | G | Water | N | N | X | 2 | |
| PWS1087-OS-050421-200 | 5/4/2021 | 1604 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1140-OS-050421-100 | 5/4/2021 | 1710 | G | Water | N | N | X | 2 | |
| PWS1140-OS-050421-200 | 5/4/2021 | 1650 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1171-IS-050421-100 | 5/4/2021 | 1825 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5/6/21 @ 13:30 | Wood | | 5/7/21 1005 | Eurofins |
| 2 | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
| 3 | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 1588901 / 1588900 / 1588915 / 1588914

Cooler Temperature(s) °C and Other Remarks: 0.7 / 0.9

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.041 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job # |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1171-IS-050421-200 | 5/4/2021 | 1802 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1148-IS-050521-100 | 5/5/2021 | 1535 | G | Water | N | N | X | 2 | |
| PWS1148-IS-050521-200 | 5/5/2021 | 1503 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1166-OS-050521-100 | 5/5/2021 | 1823 | G | Water | N | N | X | 2 | |
| PWS1166-OS-050521-200 | 5/5/2021 | 1605 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casely | 5/6/21 @ 13:30 | Wood | | 5/7/21 1005 | ETASac |
| 2 | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
| 3 | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 1588901/1588900/1588915/1588914
Cooler Temperature(s) °C and Other Remarks: 0.7 10.9

Ver: 01/16/2019

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5/14/2021

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73358-1

**Login Number: 73358**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1588914/1588915/1588900/1588901 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73508-1
Client Project/Site: WDNR - Campbell PW Sampling

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/19/2021 12:18:04 PM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-73508-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73508-1**

**Receipt**
The samples were received on 5/11/2021 10:10 AM. 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 1.9º C and 2.5º C.

**LCMS**
Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-488548.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

## Client Sample ID: PWS1130-OS-050621-100 — Lab Sample ID: 320-73508-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.0 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.3 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.6 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.1 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 3.9 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.44 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.6 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.8 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1203-OS-050621-100 — Lab Sample ID: 320-73508-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.4 | | 4.3 | 2.1 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.7 | | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.9 | | 1.7 | 0.50 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.98 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.7 | 0.73 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.6 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.1 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.1 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.28 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.3 | I | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.85 | J | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1194-OS-050621-100 — Lab Sample ID: 320-73508-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 6.1 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 3.3 | | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 3.7 | | 1.7 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1154-OS-050621-100 — Lab Sample ID: 320-73508-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 2.4 | J | 4.3 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.5 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.26 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.4 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.4 | I | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 2.1 | | 1.7 | 0.84 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1100-IS-050621-100 — Lab Sample ID: 320-73508-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 4.3 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 3.8 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 2.6 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

## Client Sample ID: PWS1100-IS-050621-100 (Continued) — Lab Sample ID: 320-73508-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanoic acid (PFHpA) | 0.77 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 2.4 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.3 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.7 | I | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.84 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1185-OS-050721-100 — Lab Sample ID: 320-73508-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.0 | J | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 0.59 | J | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 0.77 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.35 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 1.5 | J | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.8 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.93 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.7 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 3.9 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.95 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1193-OS-050721-100 — Lab Sample ID: 320-73508-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 83 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 9.0 | | 1.7 | 0.41 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.9 | | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.4 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 66 | | 1.7 | 0.71 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.40 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 7.4 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 1.4 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 5.0 | | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 24 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.88 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1196-OS-050721-100 — Lab Sample ID: 320-73508-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 5.0 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.6 | J | 1.7 | 0.42 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.1 | J | 1.7 | 0.49 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.55 | J | 1.7 | 0.21 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.6 | | 1.7 | 0.72 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 4.9 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.40 | J | 1.7 | 0.25 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.16 | J | 1.7 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 7.1 | | 1.7 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: PWS1196-OS-050721-100 (Continued) — Lab Sample ID: 320-73508-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.83 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1113-OS-050721-100 — Lab Sample ID: 320-73508-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.35 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1112-OS-050721-100 — Lab Sample ID: 320-73508-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.42 | J | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1197-OS-050721-100 — Lab Sample ID: 320-73508-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 7.3 | | 4.2 | 2.0 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorononanoic acid (PFNA) | 0.35 | J | 1.7 | 0.23 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorodecanoic acid (PFDA) | 0.50 | J | 1.7 | 0.26 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 8.8 | | 1.7 | 0.17 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.0 | J | 1.7 | 0.48 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 6.9 | | 1.7 | 0.45 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.1 | J | 1.7 | 0.82 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PWS1198-IS-050721-100 — Lab Sample ID: 320-73508-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 6.0 | | 4.1 | 1.9 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 2.1 | | 1.6 | 0.40 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 5.0 | | 1.6 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 1.5 | J | 1.6 | 0.20 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.8 | | 1.6 | 0.69 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 8.8 | | 1.6 | 0.16 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.39 | J | 1.6 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 2.4 | | 1.6 | 0.46 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.8 | | 1.6 | 0.44 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 0.94 | J | 1.6 | 0.79 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1130-OS-050621-100**
**Lab Sample ID: 320-73508-1**
**Date Collected: 05/06/21 14:32**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.0** | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.3** | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.6** | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.1** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **3.9** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.44** | **J** | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.6** | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.8** | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.83 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/14/21 23:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *85* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:50* | *1* |
| *13C5 PFPeA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:50* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:50* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:50* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:50* | *1* |

## Client Sample ID: PWS1130-OS-050621-100
**Lab Sample ID: 320-73508-1**

**Date Collected: 05/06/21 14:32**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 94 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 PFDA | 82 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 PFUnA | 91 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 PFDoA | 98 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 PFTeDA | 99 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 PFHxDA | 87 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C8 FOSA | 80 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| M2-4:2 FTS | 78 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| M2-8:2 FTS | 85 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C2 10:2 FTS | 80 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| 13C3 HFPO-DA | 81 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d3-NMeFOSAA | 72 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d5-NEtFOSAA | 73 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d-N-MeFOSA-M | 67 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d7-N-MeFOSE-M | 102 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:50 | 1 |

## Client Sample ID: PWS1203-OS-050621-100
**Lab Sample ID: 320-73508-3**

**Date Collected: 05/06/21 15:32**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.4** | | 4.3 | 2.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.7** | | 1.7 | 0.42 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.9** | | 1.7 | 0.50 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.98** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.95 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.63 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.77 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.81 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.6** | **J** | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.1** | **J** | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.1** | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.28** | **J** | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1203-OS-050621-100**
**Date Collected: 05/06/21 15:32**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-3**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.3** | **I** | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.28 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.85** | **J** | 1.7 | 0.84 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NEtFOSA | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.40 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.58 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| F-53B Major | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| F-53B Minor | ND | | 1.7 | 0.28 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/14/21 23:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *75* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C4 PFOA* | *86* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 PFHxDA* | *81* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C3 PFBS* | *74* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C8 FOSA* | *80* | | *10 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *M2-4:2 FTS* | *99* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *M2-6:2 FTS* | *106* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *M2-8:2 FTS* | *92* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C2 10:2 FTS* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *13C3 HFPO-DA* | *78* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d5-NEtFOSAA* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d7-N-MeFOSE-M* | *91* | | *10 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |
| *d9-N-EtFOSE-M* | *86* | | *10 - 150* | *05/12/21 19:52* | *05/14/21 23:59* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1194-OS-050621-100**
**Date Collected: 05/06/21 16:30**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-5**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.1 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.70 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.60 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **6.1** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **3.3** | | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **3.7** | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.81 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.99 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| NEtFOSE | ND | | 1.7 | 0.70 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/12/21 19:52 | 05/15/21 00:08 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |
| *13C2 PFHxA* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:08* | *1* |

## Client Sample ID: PWS1194-OS-050621-100
**Lab Sample ID: 320-73508-5**

**Date Collected: 05/06/21 16:30**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 97 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C2 PFUnA | 101 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C2 PFDoA | 96 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C2 PFTeDA | 86 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C2 PFHxDA | 92 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C4 PFOS | 79 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C8 FOSA | 81 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| M2-4:2 FTS | 86 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| M2-6:2 FTS | 100 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C2 10:2 FTS | 92 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| 13C3 HFPO-DA | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d3-NMeFOSAA | 81 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d-N-MeFOSA-M | 62 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d-N-EtFOSA-M | 66 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:08 | 1 |

## Client Sample ID: PWS1154-OS-050621-100
**Lab Sample ID: 320-73508-7**

**Date Collected: 05/06/21 17:10**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **2.4** | **J** | 4.3 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.50 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.94 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.76 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.5** | **J** | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.26** | **J** | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.4** | **J** | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.4** | **I** | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1154-OS-050621-100**
**Lab Sample ID: 320-73508-7**
**Date Collected: 05/06/21 17:10**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.32 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.83 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **2.1** | | 1.7 | 0.84 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NMeFOSA | ND | | 1.7 | 0.37 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NMeFOSAA | ND | | 4.3 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NEtFOSAA | ND | | 4.3 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| NEtFOSE | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| 6:2 FTS | ND | | 4.3 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 00:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *76* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C5 PFPeA* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFHxA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C4 PFHpA* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C5 PFNA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFDA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFUnA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFDoA* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C3 PFBS* | *71* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *18O2 PFHxS* | *70* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C4 PFOS* | *70* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C8 FOSA* | *72* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *M2-4:2 FTS* | *111* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *M2-6:2 FTS* | *105* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *M2-8:2 FTS* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C2 10:2 FTS* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *13C3 HFPO-DA* | *76* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d5-NEtFOSAA* | *65* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d-N-MeFOSA-M* | *57* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d-N-EtFOSA-M* | *56* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:17* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1100-IS-050621-100**
**Lab Sample ID: 320-73508-9**
**Date Collected: 05/06/21 18:31**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **4.3** | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **3.8** | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **2.6** | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.77** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **2.4** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.3** | **J** | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **3.7** | **I** | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.84** | **J** | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 00:27 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:27* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:27* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:27* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:27* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:27* | *1* |

## Client Sample ID: PWS1100-IS-050621-100
**Lab Sample ID: 320-73508-9**

**Date Collected: 05/06/21 18:31**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 104 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 PFDA | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 PFUnA | 93 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 PFDoA | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 PFTeDA | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 PFHxDA | 90 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 18O2 PFHxS | 78 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C4 PFOS | 72 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C8 FOSA | 76 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| M2-4:2 FTS | 100 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| M2-6:2 FTS | 116 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| M2-8:2 FTS | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C2 10:2 FTS | 83 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| 13C3 HFPO-DA | 83 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d5-NEtFOSAA | 72 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d-N-MeFOSA-M | 66 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d-N-EtFOSA-M | 65 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d7-N-MeFOSE-M | 90 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |
| d9-N-EtFOSE-M | 80 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:27 | 1 |

## Client Sample ID: PWS1185-OS-050721-100
**Lab Sample ID: 320-73508-11**

**Date Collected: 05/07/21 11:53**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.0** | **J** | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **0.59** | **J** | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **0.77** | **J** | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.35** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **1.5** | **J** | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.8** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.93** | **J** | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.7** | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1185-OS-050721-100**
**Date Collected: 05/07/21 11:53**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-11**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **3.9** | | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.95** | **J** | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/12/21 19:52 | 05/15/21 00:36 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *68* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C5 PFPeA* | *68* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C4 PFHpA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C4 PFOA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFDoA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFTeDA* | *86* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 PFHxDA* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C3 PFBS* | *67* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *18O2 PFHxS* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C4 PFOS* | *74* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C8 FOSA* | *76* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *M2-4:2 FTS* | *112* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *M2-6:2 FTS* | *111* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *M2-8:2 FTS* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *13C3 HFPO-DA* | *77* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d3-NMeFOSAA* | *71* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d5-NEtFOSAA* | *68* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d-N-MeFOSA-M* | *62* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d-N-EtFOSA-M* | *62* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d7-N-MeFOSE-M* | *99* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 00:36* | *1* |

## Client Sample ID: PWS1193-OS-050721-100

**Date Collected: 05/07/21 12:29**
**Date Received: 05/11/21 10:10**

## Lab Sample ID: 320-73508-13

**Matrix: Water**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **83** | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **9.0** | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.9** | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.4** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **66** | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.40** | **J** | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **7.4** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **1.4** | **J** | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **5.0** | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **24** | | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.81 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.88** | **J** | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 00:45 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:45* | *1* |
| *13C5 PFPeA* | *74* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:45* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:45* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:45* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 00:45* | *1* |

## Client Sample ID: PWS1193-OS-050721-100
**Lab Sample ID: 320-73508-13**

**Date Collected: 05/07/21 12:29**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 98 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 PFDA | 86 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 PFDoA | 93 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 PFTeDA | 92 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 PFHxDA | 85 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 18O2 PFHxS | 85 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C4 PFOS | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C8 FOSA | 77 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| M2-4:2 FTS | 89 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| M2-6:2 FTS | 100 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| M2-8:2 FTS | 94 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C2 10:2 FTS | 81 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| 13C3 HFPO-DA | 80 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d3-NMeFOSAA | 79 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d5-NEtFOSAA | 69 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d-N-EtFOSA-M | 68 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 00:45 | 1 |

## Client Sample ID: PWS1196-OS-050721-100
**Lab Sample ID: 320-73508-15**

**Date Collected: 05/07/21 14:12**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **5.0** | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.6** | **J** | 1.7 | 0.42 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.1** | **J** | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.55** | **J** | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.6** | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **4.9** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.40** | **J** | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.6** | **J** | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluoroheptanesulfonic Acid (PFHpS)** | **0.16** | **J** | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1196-OS-050721-100**
**Date Collected: 05/07/21 14:12**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-15**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **7.1** | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.83 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 01:21 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C5 PFPeA* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFHxA* | *78* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C4 PFHpA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C5 PFNA* | *98* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFTeDA* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *18O2 PFHxS* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C4 PFOS* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C8 FOSA* | *81* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *M2-4:2 FTS* | *63* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *M2-8:2 FTS* | *86* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d3-NMeFOSAA* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d5-NEtFOSAA* | *75* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d-N-EtFOSA-M* | *68* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:21* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1113-OS-050721-100**
**Lab Sample ID: 320-73508-17**
**Date Collected: 05/07/21 15:14**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.1 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.70 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.22 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.91 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.60 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.78 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.35** | **J** | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.81 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NEtFOSA | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.99 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NMeFOSE | ND | | 3.3 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| NEtFOSE | ND | | 1.7 | 0.70 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.38 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.55 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| HFPO-DA (GenX) | ND | | 3.3 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| F-53B Minor | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.33 | ng/L | | 05/12/21 19:52 | 05/15/21 01:30 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C4 PFHpA* | *95* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C4 PFOA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:30* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

## Client Sample ID: PWS1113-OS-050721-100

**Lab Sample ID: 320-73508-17**

**Date Collected: 05/07/21 15:14**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 92 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C2 PFDoA | 97 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C2 PFHxDA | 82 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C3 PFBS | 80 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 18O2 PFHxS | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C4 PFOS | 78 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C8 FOSA | 78 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| M2-4:2 FTS | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| M2-6:2 FTS | 98 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| M2-8:2 FTS | 93 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C2 10:2 FTS | 84 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| 13C3 HFPO-DA | 82 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d5-NEtFOSAA | 75 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d-N-MeFOSA-M | 66 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d7-N-MeFOSE-M | 90 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |
| d9-N-EtFOSE-M | 79 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:30 | 1 |

## Client Sample ID: PWS1112-OS-050721-100

**Lab Sample ID: 320-73508-19**

**Date Collected: 05/07/21 15:40**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.42 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.93 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.62 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.80 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.42** | **J** | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1112-OS-050721-100**
**Date Collected: 05/07/21 15:40**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-19**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.7 | 0.83 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NEtFOSA | ND | | 1.7 | 0.74 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| NEtFOSE | ND | | 1.7 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.57 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 01:40 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C5 PFPeA* | *85* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 PFHxDA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C3 PFBS* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C4 PFOS* | *82* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C8 FOSA* | *84* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *M2-4:2 FTS* | *81* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *M2-6:2 FTS* | *104* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *M2-8:2 FTS* | *108* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C2 10:2 FTS* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *13C3 HFPO-DA* | *86* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d3-NMeFOSAA* | *75* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d5-NEtFOSAA* | *78* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d-N-MeFOSA-M* | *69* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |
| *d9-N-EtFOSE-M* | *83* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:40* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1197-OS-050721-100**
**Lab Sample ID: 320-73508-21**
**Date Collected: 05/07/21 16:40**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **7.3** | | 4.2 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.7 | 0.41 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.7 | 0.49 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.7 | 0.21 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorononanoic acid (PFNA)** | **0.35** | **J** | 1.7 | 0.23 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorodecanoic acid (PFDA)** | **0.50** | **J** | 1.7 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.7 | 0.92 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.7 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.7 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.7 | 0.61 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.7 | 0.75 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.7 | 0.79 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **8.8** | | 1.7 | 0.17 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.7 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.0** | **J** | 1.7 | 0.48 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.7 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **6.9** | | 1.7 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.7 | 0.31 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.1** | **J** | 1.7 | 0.82 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NMeFOSA | ND | | 1.7 | 0.36 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NEtFOSA | ND | | 1.7 | 0.73 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NMeFOSAA | ND | | 4.2 | 1.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NEtFOSAA | ND | | 4.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NMeFOSE | ND | | 3.4 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| NEtFOSE | ND | | 1.7 | 0.71 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 4:2 FTS | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 6:2 FTS | ND | | 4.2 | 2.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 8:2 FTS | ND | | 1.7 | 0.39 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 10:2 FTS | ND | | 1.7 | 0.56 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| HFPO-DA (GenX) | ND | | 3.4 | 1.3 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| F-53B Major | ND | | 1.7 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| F-53B Minor | ND | | 1.7 | 0.27 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.7 | 0.34 | ng/L | | 05/12/21 19:52 | 05/15/21 01:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *62* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:49* | *1* |
| *13C5 PFPeA* | *75* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:49* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:49* | *1* |
| *13C4 PFHpA* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:49* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:49* | *1* |

## Client Sample ID: PWS1197-OS-050721-100
**Lab Sample ID: 320-73508-21**

**Date Collected: 05/07/21 16:40**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 98 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 PFDA | 90 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 PFUnA | 89 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 PFDoA | 85 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 PFTeDA | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 PFHxDA | 89 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C3 PFBS | 75 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 18O2 PFHxS | 83 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C8 FOSA | 85 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| M2-4:2 FTS | 147 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| M2-6:2 FTS | 141 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C2 10:2 FTS | 87 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| 13C3 HFPO-DA | 76 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d3-NMeFOSAA | 71 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d5-NEtFOSAA | 70 | | 25 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d-N-EtFOSA-M | 65 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d7-N-MeFOSE-M | 83 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |
| d9-N-EtFOSE-M | 80 | | 10 - 150 | 05/12/21 19:52 | 05/15/21 01:49 | 1 |

## Client Sample ID: PWS1198-IS-050721-100
**Lab Sample ID: 320-73508-23**

**Date Collected: 05/07/21 17:22**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **6.0** | | 4.1 | 1.9 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **2.1** | | 1.6 | 0.40 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **5.0** | | 1.6 | 0.47 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **1.5** | **J** | 1.6 | 0.20 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.8** | | 1.6 | 0.69 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.6 | 0.22 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.6 | 0.25 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.6 | 0.89 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.6 | 0.45 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.6 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.6 | 0.59 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.6 | 0.72 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.6 | 0.76 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **8.8** | | 1.6 | 0.16 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.39** | **J** | 1.6 | 0.24 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **2.4** | | 1.6 | 0.46 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.6 | 0.15 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

**Client Sample ID: PWS1198-IS-050721-100**
**Date Collected: 05/07/21 17:22**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73508-23**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorooctanesulfonic acid (PFOS)** | **2.8** | | 1.6 | 0.44 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.6 | 0.30 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.6 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.6 | 0.79 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **0.94** | **J** | 1.6 | 0.79 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NMeFOSA | ND | | 1.6 | 0.35 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NEtFOSA | ND | | 1.6 | 0.70 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NMeFOSAA | ND | | 4.1 | 0.97 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NEtFOSAA | ND | | 4.1 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NMeFOSE | ND | | 3.2 | 1.1 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| NEtFOSE | ND | | 1.6 | 0.69 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| 4:2 FTS | ND | | 1.6 | 0.19 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| 6:2 FTS | ND | | 4.1 | 2.0 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| 8:2 FTS | ND | | 1.6 | 0.37 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| 10:2 FTS | ND | | 1.6 | 0.54 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| HFPO-DA (GenX) | ND | | 3.2 | 1.2 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| F-53B Major | ND | | 1.6 | 0.19 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| F-53B Minor | ND | | 1.6 | 0.26 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.6 | 0.32 | ng/L | | 05/12/21 19:52 | 05/15/21 01:58 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFUnA* | *88* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFDoA* | *103* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 PFHxDA* | *90* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *18O2 PFHxS* | *85* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C4 PFOS* | *80* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C8 FOSA* | *84* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *M2-4:2 FTS* | *121* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *M2-6:2 FTS* | *120* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *M2-8:2 FTS* | *94* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *13C3 HFPO-DA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d3-NMeFOSAA* | *87* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d5-NEtFOSAA* | *72* | | *25 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |
| *d9-N-EtFOSE-M* | *88* | | *10 - 150* | *05/12/21 19:52* | *05/15/21 01:58* | *1* |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFBA | PFPeA | PFHxA | C4PFHA | PFOA | PFNA | PFDA | PFUnA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) |
| 320-73508-1 | PWS1130-OS-050621-100 | 85 | 89 | 93 | 94 | 95 | 94 | 82 | 91 |
| 320-73508-3 | PWS1203-OS-050621-100 | 75 | 75 | 88 | 93 | 86 | 92 | 94 | 87 |
| 320-73508-5 | PWS1194-OS-050621-100 | 76 | 79 | 88 | 91 | 94 | 99 | 97 | 101 |
| 320-73508-7 | PWS1154-OS-050621-100 | 76 | 77 | 83 | 82 | 93 | 87 | 84 | 84 |
| 320-73508-9 | PWS1100-IS-050621-100 | 77 | 83 | 87 | 90 | 96 | 104 | 87 | 93 |
| 320-73508-11 | PWS1185-OS-050721-100 | 68 | 68 | 84 | 83 | 90 | 92 | 93 | 87 |
| 320-73508-13 | PWS1193-OS-050721-100 | 80 | 74 | 89 | 93 | 95 | 98 | 86 | 87 |
| 320-73508-15 | PWS1196-OS-050721-100 | 80 | 80 | 78 | 93 | 89 | 98 | 93 | 88 |
| 320-73508-17 | PWS1113-OS-050721-100 | 87 | 79 | 91 | 95 | 87 | 99 | 90 | 92 |
| 320-73508-19 | PWS1112-OS-050721-100 | 89 | 85 | 96 | 101 | 91 | 97 | 97 | 100 |
| 320-73508-21 | PWS1197-OS-050721-100 | 62 | 75 | 91 | 94 | 96 | 98 | 90 | 89 |
| 320-73508-23 | PWS1198-IS-050721-100 | 80 | 83 | 91 | 90 | 96 | 104 | 90 | 88 |
| LCS 320-488548/2-A | Lab Control Sample | 91 | 81 | 86 | 92 | 86 | 93 | 92 | 109 |
| LCSD 320-488548/3-A | Lab Control Sample Dup | 86 | 83 | 88 | 94 | 91 | 88 | 85 | 96 |
| MB 320-488548/1-A | Method Blank | 89 | 84 | 84 | 91 | 93 | 92 | 97 | 96 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PFDoA | PFTDA | PFHxDA | C3PFBS | PFHxS | PFOS | PFOSA | M242FTS |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (25-150) |
| 320-73508-1 | PWS1130-OS-050621-100 | 98 | 99 | 87 | 87 | 86 | 77 | 80 | 78 |
| 320-73508-3 | PWS1203-OS-050621-100 | 89 | 83 | 81 | 74 | 83 | 77 | 80 | 99 |
| 320-73508-5 | PWS1194-OS-050621-100 | 96 | 86 | 92 | 77 | 86 | 79 | 81 | 86 |
| 320-73508-7 | PWS1154-OS-050621-100 | 79 | 85 | 82 | 71 | 70 | 70 | 72 | 111 |
| 320-73508-9 | PWS1100-IS-050621-100 | 84 | 84 | 90 | 77 | 78 | 72 | 76 | 100 |
| 320-73508-11 | PWS1185-OS-050721-100 | 84 | 86 | 82 | 67 | 77 | 74 | 76 | 112 |
| 320-73508-13 | PWS1193-OS-050721-100 | 93 | 92 | 85 | 77 | 85 | 84 | 77 | 89 |
| 320-73508-15 | PWS1196-OS-050721-100 | 96 | 82 | 87 | 79 | 82 | 79 | 81 | 63 |
| 320-73508-17 | PWS1113-OS-050721-100 | 97 | 83 | 82 | 80 | 87 | 78 | 78 | 87 |
| 320-73508-19 | PWS1112-OS-050721-100 | 97 | 90 | 87 | 84 | 88 | 82 | 84 | 81 |
| 320-73508-21 | PWS1197-OS-050721-100 | 85 | 87 | 89 | 75 | 83 | 80 | 85 | 147 |
| 320-73508-23 | PWS1198-IS-050721-100 | 103 | 87 | 90 | 79 | 85 | 80 | 84 | 121 |
| LCS 320-488548/2-A | Lab Control Sample | 85 | 88 | 83 | 75 | 78 | 77 | 71 | 70 |
| LCSD 320-488548/3-A | Lab Control Sample Dup | 89 | 86 | 88 | 80 | 80 | 78 | 77 | 77 |
| MB 320-488548/1-A | Method Blank | 99 | 93 | 80 | 79 | 79 | 75 | 78 | 74 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | M262FTS | M282FTS | M102FTS | HFPODA | d3NMFOSA | d5NEFOSA | dMeFOSAA | dEtFOSAA |
| Lab Sample ID | Client Sample ID | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (25-150) | (10-150) | (10-150) |
| 320-73508-1 | PWS1130-OS-050621-100 | 99 | 85 | 80 | 81 | 72 | 73 | 67 | 64 |
| 320-73508-3 | PWS1203-OS-050621-100 | 106 | 92 | 80 | 78 | 79 | 77 | 63 | 65 |
| 320-73508-5 | PWS1194-OS-050621-100 | 100 | 108 | 92 | 84 | 81 | 80 | 62 | 66 |
| 320-73508-7 | PWS1154-OS-050621-100 | 105 | 94 | 88 | 76 | 71 | 65 | 57 | 56 |
| 320-73508-9 | PWS1100-IS-050621-100 | 116 | 84 | 83 | 83 | 77 | 72 | 66 | 65 |
| 320-73508-11 | PWS1185-OS-050721-100 | 111 | 91 | 76 | 77 | 71 | 68 | 62 | 62 |
| 320-73508-13 | PWS1193-OS-050721-100 | 100 | 94 | 81 | 80 | 79 | 69 | 69 | 68 |
| 320-73508-15 | PWS1196-OS-050721-100 | 102 | 86 | 82 | 83 | 80 | 75 | 66 | 68 |
| 320-73508-17 | PWS1113-OS-050721-100 | 98 | 93 | 84 | 82 | 77 | 75 | 66 | 69 |
| 320-73508-19 | PWS1112-OS-050721-100 | 104 | 108 | 93 | 86 | 75 | 78 | 69 | 72 |
| 320-73508-21 | PWS1197-OS-050721-100 | 141 | 102 | 87 | 76 | 71 | 70 | 64 | 65 |
| 320-73508-23 | PWS1198-IS-050721-100 | 120 | 94 | 78 | 84 | 87 | 72 | 74 | 70 |
| LCS 320-488548/2-A | Lab Control Sample | 88 | 83 | 82 | 82 | 79 | 67 | 57 | 58 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| LCSD 320-488548/3-A | Lab Control Sample Dup | 99 | 87 | 80 | 85 | 75 | 70 | 63 | 64 |
| MB 320-488548/1-A | Method Blank | 99 | 100 | 83 | 86 | 75 | 75 | 60 | 64 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | |
| 320-73508-1 | PWS1130-OS-050621-100 | 102 | 81 | | | | | | |
| 320-73508-3 | PWS1203-OS-050621-100 | 91 | 86 | | | | | | |
| 320-73508-5 | PWS1194-OS-050621-100 | 94 | 82 | | | | | | |
| 320-73508-7 | PWS1154-OS-050621-100 | 88 | 76 | | | | | | |
| 320-73508-9 | PWS1100-IS-050621-100 | 90 | 80 | | | | | | |
| 320-73508-11 | PWS1185-OS-050721-100 | 99 | 80 | | | | | | |
| 320-73508-13 | PWS1193-OS-050721-100 | 100 | 82 | | | | | | |
| 320-73508-15 | PWS1196-OS-050721-100 | 97 | 87 | | | | | | |
| 320-73508-17 | PWS1113-OS-050721-100 | 90 | 79 | | | | | | |
| 320-73508-19 | PWS1112-OS-050721-100 | 95 | 83 | | | | | | |
| 320-73508-21 | PWS1197-OS-050721-100 | 83 | 80 | | | | | | |
| 320-73508-23 | PWS1198-IS-050721-100 | 96 | 88 | | | | | | |
| LCS 320-488548/2-A | Lab Control Sample | 93 | 80 | | | | | | |
| LCSD 320-488548/3-A | Lab Control Sample Dup | 102 | 77 | | | | | | |
| MB 320-488548/1-A | Method Blank | 99 | 85 | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-488548/1-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/12/21 19:52 | 05/14/21 23:23 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *89* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |
| *13C5 PFPeA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *05/12/21 19:52* | *05/14/21 23:23* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-488548/1-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 97 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C2 PFUnA | 96 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C2 PFDoA | 99 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C2 PFTeDA | 93 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C2 PFHxDA | 80 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C3 PFBS | 79 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 18O2 PFHxS | 79 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C4 PFOS | 75 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C8 FOSA | 78 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| M2-4:2 FTS | 74 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| M2-8:2 FTS | 100 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C2 10:2 FTS | 83 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| 13C3 HFPO-DA | 86 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d3-NMeFOSAA | 75 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d5-NEtFOSAA | 75 | | 25 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d-N-MeFOSA-M | 60 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d-N-EtFOSA-M | 64 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d7-N-MeFOSE-M | 99 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 | 05/12/21 19:52 | 05/14/21 23:23 | 1 |

**Lab Sample ID: LCS 320-488548/2-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 37.5 | | ng/L | | 94 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 44.6 | | ng/L | | 112 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 44.7 | | ng/L | | 112 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 37.3 | | ng/L | | 93 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 33.3 | | ng/L | | 83 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 47.8 | | ng/L | | 120 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 39.6 | | ng/L | | 99 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 47.4 | | ng/L | | 119 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.7 | | ng/L | | 107 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 43.0 | | ng/L | | 115 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 36.3 | | ng/L | | 100 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-488548/2-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 36.7 | | ng/L | | 96 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.4 | | ng/L | | 98 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 33.5 | | ng/L | | 87 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 38.3 | | ng/L | | 99 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 32.9 | | ng/L | | 85 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 |
| NMeFOSA | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 |
| NEtFOSA | 40.0 | 42.9 | | ng/L | | 107 | 60 - 135 |
| NMeFOSAA | 40.0 | 39.4 | | ng/L | | 98 | 60 - 135 |
| NEtFOSAA | 40.0 | 45.2 | | ng/L | | 113 | 60 - 135 |
| NMeFOSE | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 |
| NEtFOSE | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| 4:2 FTS | 37.4 | 40.8 | | ng/L | | 109 | 60 - 135 |
| 6:2 FTS | 37.9 | 41.5 | | ng/L | | 110 | 60 - 135 |
| 8:2 FTS | 38.3 | 43.9 | | ng/L | | 115 | 60 - 135 |
| 10:2 FTS | 38.6 | 37.4 | | ng/L | | 97 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| F-53B Major | 37.3 | 40.0 | | ng/L | | 107 | 60 - 135 |
| F-53B Minor | 37.7 | 38.2 | | ng/L | | 101 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 40.6 | | ng/L | | 108 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* |
| *13C5 PFPeA* | *81* | | *25 - 150* |
| *13C2 PFHxA* | *86* | | *25 - 150* |
| *13C4 PFHpA* | *92* | | *25 - 150* |
| *13C4 PFOA* | *86* | | *25 - 150* |
| *13C5 PFNA* | *93* | | *25 - 150* |
| *13C2 PFDA* | *92* | | *25 - 150* |
| *13C2 PFUnA* | *109* | | *25 - 150* |
| *13C2 PFDoA* | *85* | | *25 - 150* |
| *13C2 PFTeDA* | *88* | | *25 - 150* |
| *13C2 PFHxDA* | *83* | | *25 - 150* |
| *13C3 PFBS* | *75* | | *25 - 150* |
| *18O2 PFHxS* | *78* | | *25 - 150* |
| *13C4 PFOS* | *77* | | *25 - 150* |
| *13C8 FOSA* | *71* | | *10 - 150* |
| *M2-4:2 FTS* | *70* | | *25 - 150* |
| *M2-6:2 FTS* | *88* | | *25 - 150* |
| *M2-8:2 FTS* | *83* | | *25 - 150* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* |
| *d3-NMeFOSAA* | *79* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-488548/2-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *67* | | *25 - 150* |
| *d-N-MeFOSA-M* | *57* | | *10 - 150* |
| *d-N-EtFOSA-M* | *58* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* |

**Lab Sample ID: LCSD 320-488548/3-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 | 4 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 | 10 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 | 5 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 39.0 | | ng/L | | 98 | 60 - 135 | 13 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 45.0 | | ng/L | | 112 | 60 - 135 | 1 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 | 5 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 | 15 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 | 24 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 43.5 | | ng/L | | 109 | 60 - 135 | 10 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 | 0 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 6 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 | 6 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 47.2 | | ng/L | | 118 | 60 - 135 | 0 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 36.3 | | ng/L | | 103 | 60 - 135 | 4 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 38.8 | | ng/L | | 104 | 60 - 135 | 10 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 34.3 | | ng/L | | 94 | 60 - 135 | 6 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 40.0 | | ng/L | | 105 | 60 - 135 | 9 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 37.1 | | ng/L | | 100 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 34.3 | | ng/L | | 89 | 60 - 135 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 37.7 | | ng/L | | 98 | 60 - 135 | 1 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 37.1 | | ng/L | | 96 | 60 - 135 | 12 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 | 10 | 30 |
| NMeFOSA | | | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 | 2 | 30 |
| NEtFOSA | | | 40.0 | 43.3 | | ng/L | | 108 | 60 - 135 | 1 | 30 |
| NMeFOSAA | | | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 | 4 | 30 |
| NEtFOSAA | | | 40.0 | 46.2 | | ng/L | | 116 | 60 - 135 | 2 | 30 |
| NMeFOSE | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 2 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-488548/3-A**
**Matrix: Water**
**Analysis Batch: 489152**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 488548**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | | | 40.0 | 42.6 | | ng/L | | 107 | 60 - 135 | 3 | 30 |
| 4:2 FTS | | | 37.4 | 39.9 | | ng/L | | 107 | 60 - 135 | 2 | 30 |
| 6:2 FTS | | | 37.9 | 43.0 | | ng/L | | 114 | 60 - 135 | 4 | 30 |
| 8:2 FTS | | | 38.3 | 39.7 | | ng/L | | 104 | 60 - 135 | 10 | 30 |
| 10:2 FTS | | | 38.6 | 40.8 | | ng/L | | 106 | 60 - 135 | 9 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 | 0 | 30 |
| F-53B Major | | | 37.3 | 40.1 | | ng/L | | 108 | 60 - 135 | 0 | 30 |
| F-53B Minor | | | 37.7 | 40.5 | | ng/L | | 107 | 60 - 135 | 6 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 42.3 | | ng/L | | 112 | 60 - 135 | 4 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* |
| *13C5 PFPeA* | *83* | | *25 - 150* |
| *13C2 PFHxA* | *88* | | *25 - 150* |
| *13C4 PFHpA* | *94* | | *25 - 150* |
| *13C4 PFOA* | *91* | | *25 - 150* |
| *13C5 PFNA* | *88* | | *25 - 150* |
| *13C2 PFDA* | *85* | | *25 - 150* |
| *13C2 PFUnA* | *96* | | *25 - 150* |
| *13C2 PFDoA* | *89* | | *25 - 150* |
| *13C2 PFTeDA* | *86* | | *25 - 150* |
| *13C2 PFHxDA* | *88* | | *25 - 150* |
| *13C3 PFBS* | *80* | | *25 - 150* |
| *18O2 PFHxS* | *80* | | *25 - 150* |
| *13C4 PFOS* | *78* | | *25 - 150* |
| *13C8 FOSA* | *77* | | *10 - 150* |
| *M2-4:2 FTS* | *77* | | *25 - 150* |
| *M2-6:2 FTS* | *99* | | *25 - 150* |
| *M2-8:2 FTS* | *87* | | *25 - 150* |
| *13C2 10:2 FTS* | *80* | | *25 - 150* |
| *13C3 HFPO-DA* | *85* | | *25 - 150* |
| *d3-NMeFOSAA* | *75* | | *25 - 150* |
| *d5-NEtFOSAA* | *70* | | *25 - 150* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *102* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* |

## LCMS

### Prep Batch: 488548

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73508-1 | PWS1130-OS-050621-100 | Total/NA | Water | 3535 | |
| 320-73508-3 | PWS1203-OS-050621-100 | Total/NA | Water | 3535 | |
| 320-73508-5 | PWS1194-OS-050621-100 | Total/NA | Water | 3535 | |
| 320-73508-7 | PWS1154-OS-050621-100 | Total/NA | Water | 3535 | |
| 320-73508-9 | PWS1100-IS-050621-100 | Total/NA | Water | 3535 | |
| 320-73508-11 | PWS1185-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-13 | PWS1193-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-15 | PWS1196-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-17 | PWS1113-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-19 | PWS1112-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-21 | PWS1197-OS-050721-100 | Total/NA | Water | 3535 | |
| 320-73508-23 | PWS1198-IS-050721-100 | Total/NA | Water | 3535 | |
| MB 320-488548/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-488548/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-488548/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 489152

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73508-1 | PWS1130-OS-050621-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-3 | PWS1203-OS-050621-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-5 | PWS1194-OS-050621-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-7 | PWS1154-OS-050621-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-9 | PWS1100-IS-050621-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-11 | PWS1185-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-13 | PWS1193-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-15 | PWS1196-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-17 | PWS1113-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-19 | PWS1112-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-21 | PWS1197-OS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| 320-73508-23 | PWS1198-IS-050721-100 | Total/NA | Water | 537 (modified) | 488548 |
| MB 320-488548/1-A | Method Blank | Total/NA | Water | 537 (modified) | 488548 |
| LCS 320-488548/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 488548 |
| LCSD 320-488548/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 488548 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1130-OS-050621-100
**Lab Sample ID: 320-73508-1**
**Date Collected: 05/06/21 14:32**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.2 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/14/21 23:50 | K1S | TAL SAC |

## Client Sample ID: PWS1203-OS-050621-100
**Lab Sample ID: 320-73508-3**
**Date Collected: 05/06/21 15:32**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.8 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/14/21 23:59 | K1S | TAL SAC |

## Client Sample ID: PWS1194-OS-050621-100
**Lab Sample ID: 320-73508-5**
**Date Collected: 05/06/21 16:30**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.7 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 00:08 | K1S | TAL SAC |

## Client Sample ID: PWS1154-OS-050621-100
**Lab Sample ID: 320-73508-7**
**Date Collected: 05/06/21 17:10**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 292.9 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 00:17 | K1S | TAL SAC |

## Client Sample ID: PWS1100-IS-050621-100
**Lab Sample ID: 320-73508-9**
**Date Collected: 05/06/21 18:31**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 297.4 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 00:27 | K1S | TAL SAC |

## Client Sample ID: PWS1185-OS-050721-100
**Lab Sample ID: 320-73508-11**
**Date Collected: 05/07/21 11:53**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 299.4 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 00:36 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1193-OS-050721-100
**Lab Sample ID: 320-73508-13**
**Date Collected: 05/07/21 12:29**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298.3 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 00:45 | K1S | TAL SAC |

## Client Sample ID: PWS1196-OS-050721-100
**Lab Sample ID: 320-73508-15**
**Date Collected: 05/07/21 14:12**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.1 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 01:21 | K1S | TAL SAC |

## Client Sample ID: PWS1113-OS-050721-100
**Lab Sample ID: 320-73508-17**
**Date Collected: 05/07/21 15:14**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 302.1 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 01:30 | K1S | TAL SAC |

## Client Sample ID: PWS1112-OS-050721-100
**Lab Sample ID: 320-73508-19**
**Date Collected: 05/07/21 15:40**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.1 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 01:40 | K1S | TAL SAC |

## Client Sample ID: PWS1197-OS-050721-100
**Lab Sample ID: 320-73508-21**
**Date Collected: 05/07/21 16:40**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 297.3 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 01:49 | K1S | TAL SAC |

## Client Sample ID: PWS1198-IS-050721-100
**Lab Sample ID: 320-73508-23**
**Date Collected: 05/07/21 17:22**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 308.6 mL | 10.00 mL | 488548 | 05/12/21 19:52 | AP | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489152 | 05/15/21 01:58 | K1S | TAL SAC |

**Laboratory References:**
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73508-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73508-1
Project/Site: WDNR - Campbell PW Sampling

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73508-1 | PWS1130-OS-050621-100 | Water | 05/06/21 14:32 | 05/11/21 10:10 | |
| 320-73508-3 | PWS1203-OS-050621-100 | Water | 05/06/21 15:32 | 05/11/21 10:10 | |
| 320-73508-5 | PWS1194-OS-050621-100 | Water | 05/06/21 16:30 | 05/11/21 10:10 | |
| 320-73508-7 | PWS1154-OS-050621-100 | Water | 05/06/21 17:10 | 05/11/21 10:10 | |
| 320-73508-9 | PWS1100-IS-050621-100 | Water | 05/06/21 18:31 | 05/11/21 10:10 | |
| 320-73508-11 | PWS1185-OS-050721-100 | Water | 05/07/21 11:53 | 05/11/21 10:10 | |
| 320-73508-13 | PWS1193-OS-050721-100 | Water | 05/07/21 12:29 | 05/11/21 10:10 | |
| 320-73508-15 | PWS1196-OS-050721-100 | Water | 05/07/21 14:12 | 05/11/21 10:10 | |
| 320-73508-17 | PWS1113-OS-050721-100 | Water | 05/07/21 15:14 | 05/11/21 10:10 | |
| 320-73508-19 | PWS1112-OS-050721-100 | Water | 05/07/21 15:40 | 05/11/21 10:10 | |
| 320-73508-21 | PWS1197-OS-050721-100 | Water | 05/07/21 16:40 | 05/11/21 10:10 | |
| 320-73508-23 | PWS1198-IS-050721-100 | Water | 05/07/21 17:22 | 05/11/21 10:10 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.042 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

320-73508 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1130-OS-050621-100 | 5/6/2021 | 1432 | G | Water | N | N | X | 2 | |
| PWS1130-OS-050621-200 | 5/6/2021 | 1408 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1203-OS-050621-100 | 5/6/2021 | 1532 | G | Water | N | N | X | 2 | |
| PWS1203-OS-050621-200 | 5/6/2021 | 1513 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1194-OS-050621-100 | 5/6/2021 | 1630 | G | Water | N | N | X | 2 | |
| PWS1194-OS-050621-200 | 5/6/2021 | 1611 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1154-OS-050621-100 | 5/6/2021 | 1710 | G | Water | N | N | X | 2 | |
| PWS1154-OS-050621-200 | 5/6/2021 | 1650 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1100-IS-050621-100 | 5/6/2021 | 1831 | G | Water | N | N | X | 2 | |
| PWS1100-IS-050621-200 | 5/6/2021 | 1813 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1185-OS-050721-100 | 5/7/2021 | 1153 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Karina Casey | Date/Time: 5-10-21@1800 | Company: Wood | Received by: | Date/Time: 5/11/21 1010 | Company: Eurofins |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 1588908 / 1588909 / 1588910 / 1588911
Cooler Temperature(s) °C and Other Remarks: 2.5, 1.9

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.043 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1185-OS-050721-200 | 5/7/2021 | 1133 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1193-OS-050721-100 | 5/7/2021 | 1229 | G | Water | N | N | X | 2 | |
| PWS1193-OS-050721-200 | 5/7/2021 | 1211 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1196-OS-050721-100 | 5/7/2021 | 1412 | G | Water | N | N | X | 2 | |
| PWS1196-OS-050721-200 | 5/7/2021 | 1352 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1113-OS-050721-100 | 5/7/2021 | 1514 | G | Water | N | N | X | 2 | |
| PWS1113-OS-050721-200 | 5/7/2021 | 1455 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1112-OS-050721-100 | 5/7/2021 | 1540 | G | Water | N | N | X | 2 | |
| PWS1112-OS-050721-200 | 5/7/2021 | 1518 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1197-OS-050721-100 | 5/7/2021 | 1640 | G | Water | N | N | X | 2 | |
| PWS1197-OS-050721-200 | 5/7/2021 | 1619 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-10-21 @ 1800 | Wood | | 5/11/21 1010 | EDS |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: △ Yes △ No
Custody Seal No.: 1588908 / 1588909 / 1588910 / 1588911
Cooler Temperature(s) °C and Other Remarks: 2.5, 1.9

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.044 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1198-IS-050721-100 | 5/7/2021 | 1722 | G | Water | N | N | X | 2 | |
| PWS1198-IS-050721-200 | 5/7/2021 | 1706 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-10-21 @1800 | Wood | | 5/11/21 1010 | Eurofins |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1588908 / 1588909 / 1588910 / 1588911

Cooler Temperature(s) °C and Other Remarks: 2.5 / 1.9

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73508-1

**Login Number: 73508**
**List Number: 1**
**Creator: Oropeza, Salvador**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1588911/1588910/1588909/1588908 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73512-1
Client Project/Site: WDNR - Campbell PW Sampling

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*5/24/2021 8:20:43 AM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

Review your project results through TotalAccess

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |

## Job ID: 320-73512-1

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Job Narrative**
**320-73512-1**

**Receipt**
The samples were received on 5/11/2021 10:10 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 was 2.2º C.

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-488559.

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

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PUB1202-TN-050621-100 — Lab Sample ID: 320-73512-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.45 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.80 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.0 | B | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1209-TN-050621-100 — Lab Sample ID: 320-73512-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.70 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1219-NN-050721-100 — Lab Sample ID: 320-73512-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 8.0 | | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.3 | | 1.9 | 0.80 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.99 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanesulfonic acid (PFPeS) | 0.54 | J | 1.9 | 0.28 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 1.1 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.7 | J | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1201-TN-050721-100 — Lab Sample ID: 320-73512-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.5 | J | 4.7 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 0.48 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1215-TN-050721-100 — Lab Sample ID: 320-73512-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanesulfonic acid (PFBS) | 0.43 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonamide (FOSA) | 1.4 | J | 1.9 | 0.95 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1218-OTM-050721-100 — Lab Sample ID: 320-73512-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 3.1 | J | 4.8 | 2.3 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoropentanoic acid (PFPeA) | 1.7 | J | 1.9 | 0.47 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanoic acid (PFHxA) | 1.4 | J | 1.9 | 0.55 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluoroheptanoic acid (PFHpA) | 0.87 | J | 1.9 | 0.24 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanoic acid (PFOA) | 2.1 | | 1.9 | 0.81 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorobutanesulfonic acid (PFBS) | 1.0 | J | 1.9 | 0.19 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorohexanesulfonic acid (PFHxS) | 0.71 | J | 1.9 | 0.54 | ng/L | 1 | | 537 (modified) | Total/NA |
| Perfluorooctanesulfonic acid (PFOS) | 2.8 | B | 1.9 | 0.52 | ng/L | 1 | | 537 (modified) | Total/NA |

## Client Sample ID: PUB1210-TN-050721-100 — Lab Sample ID: 320-73512-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | 1.8 | J | 1.9 | 0.93 | ng/L | 1 | | 537 (modified) | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1202-TN-050621-100**
**Lab Sample ID: 320-73512-1**
**Date Collected: 05/06/21 10:04**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.8 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.47 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.45** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.80** | **J** | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.0** | **B** | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.94 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.95 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 05/13/21 04:58 | 05/14/21 15:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *72* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:04* | *1* |
| *13C5 PFPeA* | *76* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:04* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:04* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:04* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:04* | *1* |

## Client Sample ID: PUB1202-TN-050621-100
**Lab Sample ID: 320-73512-1**

**Date Collected: 05/06/21 10:04**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 89 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 PFDA | 90 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 PFUnA | 97 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 PFDoA | 104 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 PFTeDA | 87 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C3 PFBS | 76 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 18O2 PFHxS | 81 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C4 PFOS | 71 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C8 FOSA | 81 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| M2-4:2 FTS | 109 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| M2-6:2 FTS | 110 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| M2-8:2 FTS | 86 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| 13C3 HFPO-DA | 76 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d3-NMeFOSAA | 77 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d5-NEtFOSAA | 73 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d-N-MeFOSA-M | 64 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d-N-EtFOSA-M | 60 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d7-N-MeFOSE-M | 86 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |
| d9-N-EtFOSE-M | 81 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:04 | 1 |

## Client Sample ID: PUB1209-TN-050621-100
**Lab Sample ID: 320-73512-3**

**Date Collected: 05/06/21 10:46**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.9 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.48 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.71 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.86 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.70** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1209-TN-050621-100**
**Lab Sample ID: 320-73512-3**
**Date Collected: 05/06/21 10:46**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.94 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.95 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NMeFOSA | ND | | 1.9 | 0.42 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NEtFOSA | ND | | 1.9 | 0.84 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NMeFOSAA | ND | | 4.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NEtFOSAA | ND | | 4.9 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| NEtFOSE | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| 6:2 FTS | ND | | 4.9 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.45 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.5 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 05/13/21 04:58 | 05/14/21 15:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFHxA* | *93* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C5 PFNA* | *101* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFUnA* | *93* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFDoA* | *99* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFTeDA* | *94* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C3 PFBS* | *82* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *18O2 PFHxS* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C4 PFOS* | *81* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C8 FOSA* | *82* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *M2-4:2 FTS* | *100* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *M2-6:2 FTS* | *111* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *M2-8:2 FTS* | *107* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C2 10:2 FTS* | *81* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *13C3 HFPO-DA* | *80* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d3-NMeFOSAA* | *70* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d5-NEtFOSAA* | *72* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:13* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1219-NN-050721-100**
**Lab Sample ID: 320-73512-5**
**Date Collected: 05/07/21 08:23**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **8.0** | | 4.7 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.3** | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.99** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| **Perfluoropentanesulfonic acid (PFPeS)** | **0.54** | **J** | 1.9 | 0.28 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **1.1** | **J** | 1.9 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.7** | **J** | 1.9 | 0.93 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/13/21 04:58 | 05/14/21 15:22 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *65* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:22* | *1* |
| *13C5 PFPeA* | *76* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:22* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:22* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:22* | *1* |
| *13C4 PFOA* | *89* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:22* | *1* |

## Client Sample ID: PUB1219-NN-050721-100

**Lab Sample ID: 320-73512-5**

**Date Collected: 05/07/21 08:23**

**Matrix: Water**

**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C5 PFNA | 91 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 PFDA | 85 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 PFUnA | 92 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 PFDoA | 83 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C3 PFBS | 70 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 18O2 PFHxS | 79 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C4 PFOS | 79 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C8 FOSA | 79 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| M2-4:2 FTS | 141 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| M2-6:2 FTS | 128 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| M2-8:2 FTS | 102 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C2 10:2 FTS | 72 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| 13C3 HFPO-DA | 74 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d3-NMeFOSAA | 72 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d5-NEtFOSAA | 67 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d-N-MeFOSA-M | 63 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d-N-EtFOSA-M | 57 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d7-N-MeFOSE-M | 76 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |
| d9-N-EtFOSE-M | 67 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 15:22 | 1 |

## Client Sample ID: PUB1201-TN-050721-100

**Lab Sample ID: 320-73512-7**

**Date Collected: 05/07/21 09:30**

**Matrix: Water**

**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.5** | **J** | 4.7 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.25 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.48** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1201-TN-050721-100**
**Lab Sample ID: 320-73512-7**
**Date Collected: 05/07/21 09:30**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.91 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.92 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.43 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/13/21 04:58 | 05/14/21 15:31 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *70* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C5 PFPeA* | *72* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFHxA* | *86* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C3 PFBS* | *71* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *18O2 PFHxS* | *83* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C4 PFOS* | *76* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C8 FOSA* | *79* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *M2-4:2 FTS* | *130* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *M2-6:2 FTS* | *126* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *M2-8:2 FTS* | *99* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C2 10:2 FTS* | *76* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *13C3 HFPO-DA* | *76* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d3-NMeFOSAA* | *66* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d5-NEtFOSAA* | *74* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d-N-MeFOSA-M* | *64* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d-N-EtFOSA-M* | *61* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d7-N-MeFOSE-M* | *83* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |
| *d9-N-EtFOSE-M* | *73* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 15:31* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1215-TN-050721-100**
**Lab Sample ID: 320-73512-9**
**Date Collected: 05/07/21 10:02**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.9 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.48 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.56 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.83 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.71 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.87 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.91 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **0.43** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.53 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.36 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.94 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.4** | **J** | 1.9 | 0.95 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NMeFOSA | ND | | 1.9 | 0.42 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NEtFOSA | ND | | 1.9 | 0.85 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NMeFOSAA | ND | | 4.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NEtFOSAA | ND | | 4.9 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NMeFOSE | ND | | 3.9 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| NEtFOSE | ND | | 1.9 | 0.83 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 6:2 FTS | ND | | 4.9 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.45 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.65 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| HFPO-DA (GenX) | ND | | 3.9 | 1.5 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.39 | ng/L | | 05/13/21 04:58 | 05/14/21 16:08 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *90* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |
| *13C5 PFPeA* | *83* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |
| *13C5 PFNA* | *108* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:08* | *1* |

## Client Sample ID: PUB1215-TN-050721-100
**Lab Sample ID: 320-73512-9**

**Date Collected: 05/07/21 10:02**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 93 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C2 PFUnA | 122 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C2 PFDoA | 102 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C2 PFTeDA | 94 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C3 PFBS | 84 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 18O2 PFHxS | 86 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C4 PFOS | 77 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C8 FOSA | 84 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| M2-4:2 FTS | 85 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| M2-6:2 FTS | 104 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| M2-8:2 FTS | 87 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C2 10:2 FTS | 83 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| 13C3 HFPO-DA | 87 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d3-NMeFOSAA | 70 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:08 | 1 |

## Client Sample ID: PUB1218-OTM-050721-100
**Lab Sample ID: 320-73512-11**

**Date Collected: 05/07/21 10:57**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perfluorobutanoic acid (PFBA)** | **3.1** | **J** | 4.8 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluoropentanoic acid (PFPeA)** | **1.7** | **J** | 1.9 | 0.47 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluorohexanoic acid (PFHxA)** | **1.4** | **J** | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluoroheptanoic acid (PFHpA)** | **0.87** | **J** | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluorooctanoic acid (PFOA)** | **2.1** | | 1.9 | 0.81 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.53 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.70 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.85 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.90 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluorobutanesulfonic acid (PFBS)** | **1.0** | **J** | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluorohexanesulfonic acid (PFHxS)** | **0.71** | **J** | 1.9 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| **Perfluorooctanesulfonic acid (PFOS)** | **2.8** | **B** | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73512-1

**Client Sample ID: PUB1218-OTM-050721-100**
**Date Collected: 05/07/21 10:57**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73512-11**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.93 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 1.9 | 0.94 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NEtFOSA | ND | | 1.9 | 0.83 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NMeFOSAA | ND | | 4.8 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NEtFOSAA | ND | | 4.8 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| NEtFOSE | ND | | 1.9 | 0.81 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| 6:2 FTS | ND | | 4.8 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.64 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| F-53B Minor | ND | | 1.9 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/13/21 04:58 | 05/14/21 16:17 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *80* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C5 PFPeA* | *82* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C5 PFNA* | *88* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFTeDA* | *95* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 PFHxDA* | *96* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *18O2 PFHxS* | *86* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C4 PFOS* | *77* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C8 FOSA* | *80* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *M2-4:2 FTS* | *84* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *M2-8:2 FTS* | *86* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C2 10:2 FTS* | *78* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d5-NEtFOSAA* | *74* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d-N-MeFOSA-M* | *68* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d-N-EtFOSA-M* | *71* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |
| *d9-N-EtFOSE-M* | *84* | | *10 - 150* | *05/13/21 04:58* | *05/14/21 16:17* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73512-1

**Client Sample ID: PUB1210-TN-050721-100**
**Date Collected: 05/07/21 13:29**
**Date Received: 05/11/21 10:10**

**Lab Sample ID: 320-73512-13**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 4.7 | 2.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 1.9 | 0.46 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 1.9 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 1.9 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 1.9 | 0.26 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 1.9 | 0.29 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 1.9 | 1.0 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 1.9 | 0.52 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 1.9 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 1.9 | 0.69 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 1.9 | 0.84 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 1.9 | 0.89 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 1.9 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 1.9 | 0.28 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 1.9 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 1.9 | 0.18 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 1.9 | 0.51 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 1.9 | 0.35 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 1.9 | 0.92 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| **Perfluorooctanesulfonamide (FOSA)** | **1.8** | **J** | 1.9 | 0.93 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NMeFOSA | ND | | 1.9 | 0.41 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NEtFOSA | ND | | 1.9 | 0.82 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NMeFOSAA | ND | | 4.7 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NEtFOSAA | ND | | 4.7 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NMeFOSE | ND | | 3.8 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| NEtFOSE | ND | | 1.9 | 0.80 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 4:2 FTS | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 6:2 FTS | ND | | 4.7 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 8:2 FTS | ND | | 1.9 | 0.44 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 10:2 FTS | ND | | 1.9 | 0.63 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| HFPO-DA (GenX) | ND | | 3.8 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| F-53B Major | ND | | 1.9 | 0.23 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| F-53B Minor | ND | | 1.9 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 1.9 | 0.38 | ng/L | | 05/13/21 04:58 | 05/14/21 16:26 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *87* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C5 PFPeA* | *86* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 16:26* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PUB1210-TN-050721-100**
**Lab Sample ID: 320-73512-13**
**Date Collected: 05/07/21 13:29**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFUnA | 106 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C2 PFDoA | 110 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C2 PFTeDA | 101 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C2 PFHxDA | 99 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C3 PFBS | 85 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C4 PFOS | 86 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C8 FOSA | 86 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| M2-4:2 FTS | 103 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| M2-6:2 FTS | 104 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| M2-8:2 FTS | 93 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C2 10:2 FTS | 85 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| 13C3 HFPO-DA | 88 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d3-NMeFOSAA | 67 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d5-NEtFOSAA | 83 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d-N-MeFOSA-M | 67 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d-N-EtFOSA-M | 69 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |
| d9-N-EtFOSE-M | 92 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 16:26 | 1 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73512-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-73512-1 | PUB1202-TN-050621-100 | 72 | 76 | 85 | 90 | 95 | 89 | 90 | 97 |
| 320-73512-3 | PUB1209-TN-050621-100 | 87 | 95 | 93 | 100 | 95 | 101 | 91 | 93 |
| 320-73512-5 | PUB1219-NN-050721-100 | 65 | 76 | 85 | 90 | 89 | 91 | 85 | 92 |
| 320-73512-7 | PUB1201-TN-050721-100 | 70 | 72 | 86 | 97 | 94 | 99 | 95 | 91 |
| 320-73512-9 | PUB1215-TN-050721-100 | 90 | 83 | 92 | 104 | 97 | 108 | 93 | 122 |
| 320-73512-11 | PUB1218-OTM-050721-100 | 80 | 82 | 89 | 98 | 94 | 88 | 90 | 94 |
| 320-73512-13 | PUB1210-TN-050721-100 | 87 | 86 | 97 | 101 | 92 | 103 | 100 | 106 |
| LCS 320-488559/2-A | Lab Control Sample | 86 | 81 | 92 | 89 | 92 | 92 | 93 | 95 |
| LCSD 320-488559/3-A | Lab Control Sample Dup | 79 | 80 | 89 | 89 | 94 | 86 | 99 | 92 |
| MB 320-488559/1-A | Method Blank | 81 | 78 | 91 | 88 | 96 | 99 | 95 | 100 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-73512-1 | PUB1202-TN-050621-100 | 104 | 87 | 94 | 76 | 81 | 71 | 81 | 109 |
| 320-73512-3 | PUB1209-TN-050621-100 | 99 | 94 | 97 | 82 | 95 | 81 | 82 | 100 |
| 320-73512-5 | PUB1219-NN-050721-100 | 83 | 89 | 94 | 70 | 79 | 79 | 79 | 141 |
| 320-73512-7 | PUB1201-TN-050721-100 | 90 | 87 | 94 | 71 | 83 | 76 | 79 | 130 |
| 320-73512-9 | PUB1215-TN-050721-100 | 102 | 94 | 100 | 84 | 86 | 77 | 84 | 85 |
| 320-73512-11 | PUB1218-OTM-050721-100 | 96 | 95 | 96 | 79 | 86 | 77 | 80 | 84 |
| 320-73512-13 | PUB1210-TN-050721-100 | 110 | 101 | 99 | 85 | 88 | 86 | 86 | 103 |
| LCS 320-488559/2-A | Lab Control Sample | 89 | 96 | 95 | 77 | 85 | 79 | 83 | 78 |
| LCSD 320-488559/3-A | Lab Control Sample Dup | 94 | 89 | 90 | 78 | 81 | 79 | 79 | 78 |
| MB 320-488559/1-A | Method Blank | 96 | 96 | 92 | 77 | 82 | 80 | 79 | 76 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-73512-1 | PUB1202-TN-050621-100 | 110 | 86 | 82 | 76 | 77 | 73 | 64 | 60 |
| 320-73512-3 | PUB1209-TN-050621-100 | 111 | 107 | 81 | 80 | 70 | 72 | 68 | 71 |
| 320-73512-5 | PUB1219-NN-050721-100 | 128 | 102 | 72 | 74 | 72 | 67 | 63 | 57 |
| 320-73512-7 | PUB1201-TN-050721-100 | 126 | 99 | 76 | 76 | 66 | 74 | 64 | 61 |
| 320-73512-9 | PUB1215-TN-050721-100 | 104 | 87 | 83 | 87 | 70 | 80 | 72 | 69 |
| 320-73512-11 | PUB1218-OTM-050721-100 | 102 | 86 | 78 | 82 | 77 | 74 | 68 | 71 |
| 320-73512-13 | PUB1210-TN-050721-100 | 104 | 93 | 85 | 88 | 67 | 83 | 67 | 69 |
| LCS 320-488559/2-A | Lab Control Sample | 112 | 101 | 85 | 81 | 77 | 75 | 63 | 64 |
| LCSD 320-488559/3-A | Lab Control Sample Dup | 96 | 86 | 82 | 83 | 77 | 67 | 66 | 65 |
| MB 320-488559/1-A | Method Blank | 107 | 97 | 95 | 84 | 81 | 80 | 72 | 70 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) |
| 320-73512-1 | PUB1202-TN-050621-100 | 86 | 81 |
| 320-73512-3 | PUB1209-TN-050621-100 | 88 | 76 |
| 320-73512-5 | PUB1219-NN-050721-100 | 76 | 67 |
| 320-73512-7 | PUB1201-TN-050721-100 | 83 | 73 |
| 320-73512-9 | PUB1215-TN-050721-100 | 89 | 84 |
| 320-73512-11 | PUB1218-OTM-050721-100 | 92 | 84 |
| 320-73512-13 | PUB1210-TN-050721-100 | 94 | 92 |
| LCS 320-488559/2-A | Lab Control Sample | 88 | 87 |
| LCSD 320-488559/3-A | Lab Control Sample Dup | 92 | 89 |
| MB 320-488559/1-A | Method Blank | 96 | 82 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73512-1

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-488559/1-A**
**Matrix: Water**
**Analysis Batch: 489079**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | 0.649 | J | 2.0 | 0.54 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 05/13/21 04:58 | 05/14/21 14:08 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |
| *13C5 PFPeA* | *78* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |
| *13C2 PFHxA* | *91* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |
| *13C4 PFHpA* | *88* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *05/13/21 04:58* | *05/14/21 14:08* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-488559/1-A**
**Matrix: Water**
**Analysis Batch: 489079**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 95 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C2 PFUnA | 100 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C2 PFDoA | 96 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C2 PFTeDA | 96 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C2 PFHxDA | 92 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C3 PFBS | 77 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 18O2 PFHxS | 82 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C4 PFOS | 80 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C8 FOSA | 79 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| M2-4:2 FTS | 76 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| M2-6:2 FTS | 107 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| M2-8:2 FTS | 97 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C2 10:2 FTS | 95 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| 13C3 HFPO-DA | 84 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d3-NMeFOSAA | 81 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d5-NEtFOSAA | 80 | | 25 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d-N-MeFOSA-M | 72 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d-N-EtFOSA-M | 70 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |
| d9-N-EtFOSE-M | 82 | | 10 - 150 | 05/13/21 04:58 | 05/14/21 14:08 | 1 |

**Lab Sample ID: LCS 320-488559/2-A**
**Matrix: Water**
**Analysis Batch: 489830**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 45.3 | | ng/L | | 113 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 48.1 | | ng/L | | 120 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 48.8 | | ng/L | | 122 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 45.0 | | ng/L | | 112 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 44.6 | | ng/L | | 111 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 45.5 | | ng/L | | 114 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 46.9 | | ng/L | | 117 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 44.2 | | ng/L | | 110 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 45.4 | | ng/L | | 113 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 47.2 | | ng/L | | 118 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 41.4 | | ng/L | | 117 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 46.3 | | ng/L | | 123 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 40.3 | | ng/L | | 111 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-488559/2-A**
**Matrix: Water**
**Analysis Batch: 489830**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 47.9 | | ng/L | | 126 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 41.8 | | ng/L | | 113 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.8 | | ng/L | | 104 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 43.7 | | ng/L | | 113 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 46.4 | | ng/L | | 120 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 |
| NMeFOSA | 40.0 | 46.0 | | ng/L | | 115 | 60 - 135 |
| NEtFOSA | 40.0 | 48.8 | | ng/L | | 122 | 60 - 135 |
| NMeFOSAA | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| NEtFOSAA | 40.0 | 45.7 | | ng/L | | 114 | 60 - 135 |
| NMeFOSE | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 |
| NEtFOSE | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 |
| 4:2 FTS | 37.4 | 40.9 | | ng/L | | 110 | 60 - 135 |
| 6:2 FTS | 37.9 | 44.7 | | ng/L | | 118 | 60 - 135 |
| 8:2 FTS | 38.3 | 43.8 | | ng/L | | 114 | 60 - 135 |
| 10:2 FTS | 38.6 | 39.1 | | ng/L | | 101 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 45.7 | | ng/L | | 114 | 60 - 135 |
| F-53B Major | 37.3 | 44.1 | | ng/L | | 118 | 60 - 135 |
| F-53B Minor | 37.7 | 44.0 | | ng/L | | 117 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 47.1 | | ng/L | | 125 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *86* | | *25 - 150* |
| *13C5 PFPeA* | *81* | | *25 - 150* |
| *13C2 PFHxA* | *92* | | *25 - 150* |
| *13C4 PFHpA* | *89* | | *25 - 150* |
| *13C4 PFOA* | *92* | | *25 - 150* |
| *13C5 PFNA* | *92* | | *25 - 150* |
| *13C2 PFDA* | *93* | | *25 - 150* |
| *13C2 PFUnA* | *95* | | *25 - 150* |
| *13C2 PFDoA* | *89* | | *25 - 150* |
| *13C2 PFTeDA* | *96* | | *25 - 150* |
| *13C2 PFHxDA* | *95* | | *25 - 150* |
| *13C3 PFBS* | *77* | | *25 - 150* |
| *18O2 PFHxS* | *85* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *83* | | *10 - 150* |
| *M2-4:2 FTS* | *78* | | *25 - 150* |
| *M2-6:2 FTS* | *112* | | *25 - 150* |
| *M2-8:2 FTS* | *101* | | *25 - 150* |
| *13C2 10:2 FTS* | *85* | | *25 - 150* |
| *13C3 HFPO-DA* | *81* | | *25 - 150* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-488559/2-A**
**Matrix: Water**
**Analysis Batch: 489830**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *75* | | *25 - 150* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* |
| *d-N-EtFOSA-M* | *64* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* |

**Lab Sample ID: LCSD 320-488559/3-A**
**Matrix: Water**
**Analysis Batch: 489079**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 45.3 | | ng/L | | 113 | 60 - 135 | 2 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 | 4 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 46.6 | | ng/L | | 117 | 60 - 135 | 3 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 48.7 | | ng/L | | 122 | 60 - 135 | 1 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 | 5 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 47.5 | | ng/L | | 119 | 60 - 135 | 6 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 | 10 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 | 5 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 43.6 | | ng/L | | 109 | 60 - 135 | 4 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 | 6 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 41.0 | | ng/L | | 103 | 60 - 135 | 7 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 50.3 | | ng/L | | 126 | 60 - 135 | 10 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 50.4 | | ng/L | | 126 | 60 - 135 | 7 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 40.9 | | ng/L | | 116 | 60 - 135 | 1 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 49.0 | | ng/L | | 130 | 60 - 135 | 6 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 39.0 | | ng/L | | 107 | 60 - 135 | 3 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 43.6 | | ng/L | | 115 | 60 - 135 | 9 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 40.5 | | ng/L | | 109 | 60 - 135 | 23 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 41.1 | | ng/L | | 107 | 60 - 135 | 3 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 41.7 | | ng/L | | 108 | 60 - 135 | 5 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 40.4 | | ng/L | | 104 | 60 - 135 | 14 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 2 | 30 |
| NMeFOSA | | | 40.0 | 46.9 | | ng/L | | 117 | 60 - 135 | 2 | 30 |
| NEtFOSA | | | 40.0 | 49.4 | | ng/L | | 123 | 60 - 135 | 1 | 30 |
| NMeFOSAA | | | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 | 1 | 30 |
| NEtFOSAA | | | 40.0 | 46.4 | | ng/L | | 116 | 60 - 135 | 2 | 30 |
| NMeFOSE | | | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 | 9 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-488559/3-A**
**Matrix: Water**
**Analysis Batch: 489079**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 488559**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | | | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 | 7 | 30 |
| 4:2 FTS | | | 37.4 | 42.2 | | ng/L | | 113 | 60 - 135 | 3 | 30 |
| 6:2 FTS | | | 37.9 | 48.3 | | ng/L | | 127 | 60 - 135 | 8 | 30 |
| 8:2 FTS | | | 38.3 | 42.7 | | ng/L | | 112 | 60 - 135 | 2 | 30 |
| 10:2 FTS | | | 38.6 | 42.0 | | ng/L | | 109 | 60 - 135 | 7 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 44.5 | | ng/L | | 111 | 60 - 135 | 3 | 30 |
| F-53B Major | | | 37.3 | 44.7 | | ng/L | | 120 | 60 - 135 | 1 | 30 |
| F-53B Minor | | | 37.7 | 44.3 | | ng/L | | 118 | 60 - 135 | 1 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 45.7 | | ng/L | | 121 | 60 - 135 | 3 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *79* | | *25 - 150* |
| *13C5 PFPeA* | *80* | | *25 - 150* |
| *13C2 PFHxA* | *89* | | *25 - 150* |
| *13C4 PFHpA* | *89* | | *25 - 150* |
| *13C4 PFOA* | *94* | | *25 - 150* |
| *13C5 PFNA* | *86* | | *25 - 150* |
| *13C2 PFDA* | *99* | | *25 - 150* |
| *13C2 PFUnA* | *92* | | *25 - 150* |
| *13C2 PFDoA* | *94* | | *25 - 150* |
| *13C2 PFTeDA* | *89* | | *25 - 150* |
| *13C2 PFHxDA* | *90* | | *25 - 150* |
| *13C3 PFBS* | *78* | | *25 - 150* |
| *18O2 PFHxS* | *81* | | *25 - 150* |
| *13C4 PFOS* | *79* | | *25 - 150* |
| *13C8 FOSA* | *79* | | *10 - 150* |
| *M2-4:2 FTS* | *78* | | *25 - 150* |
| *M2-6:2 FTS* | *96* | | *25 - 150* |
| *M2-8:2 FTS* | *86* | | *25 - 150* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* |
| *d3-NMeFOSAA* | *77* | | *25 - 150* |
| *d5-NEtFOSAA* | *67* | | *25 - 150* |
| *d-N-MeFOSA-M* | *66* | | *10 - 150* |
| *d-N-EtFOSA-M* | *65* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* |

## LCMS

### Prep Batch: 488559

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73512-1 | PUB1202-TN-050621-100 | Total/NA | Water | 3535 | |
| 320-73512-3 | PUB1209-TN-050621-100 | Total/NA | Water | 3535 | |
| 320-73512-5 | PUB1219-NN-050721-100 | Total/NA | Water | 3535 | |
| 320-73512-7 | PUB1201-TN-050721-100 | Total/NA | Water | 3535 | |
| 320-73512-9 | PUB1215-TN-050721-100 | Total/NA | Water | 3535 | |
| 320-73512-11 | PUB1218-OTM-050721-100 | Total/NA | Water | 3535 | |
| 320-73512-13 | PUB1210-TN-050721-100 | Total/NA | Water | 3535 | |
| MB 320-488559/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-488559/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-488559/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 489079

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73512-1 | PUB1202-TN-050621-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-3 | PUB1209-TN-050621-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-5 | PUB1219-NN-050721-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-7 | PUB1201-TN-050721-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-9 | PUB1215-TN-050721-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-11 | PUB1218-OTM-050721-100 | Total/NA | Water | 537 (modified) | 488559 |
| 320-73512-13 | PUB1210-TN-050721-100 | Total/NA | Water | 537 (modified) | 488559 |
| MB 320-488559/1-A | Method Blank | Total/NA | Water | 537 (modified) | 488559 |
| LCSD 320-488559/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 488559 |

### Analysis Batch: 489830

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 320-488559/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 488559 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PUB1202-TN-050621-100
**Lab Sample ID: 320-73512-1**
**Date Collected: 05/06/21 10:04**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 259.2 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 15:04 | S1M | TAL SAC |

## Client Sample ID: PUB1209-TN-050621-100
**Lab Sample ID: 320-73512-3**
**Date Collected: 05/06/21 10:46**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 257.6 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 15:13 | S1M | TAL SAC |

## Client Sample ID: PUB1219-NN-050721-100
**Lab Sample ID: 320-73512-5**
**Date Collected: 05/07/21 08:23**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264.5 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 15:22 | S1M | TAL SAC |

## Client Sample ID: PUB1201-TN-050721-100
**Lab Sample ID: 320-73512-7**
**Date Collected: 05/07/21 09:30**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.4 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 15:31 | S1M | TAL SAC |

## Client Sample ID: PUB1215-TN-050721-100
**Lab Sample ID: 320-73512-9**
**Date Collected: 05/07/21 10:02**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 256.9 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 16:08 | S1M | TAL SAC |

## Client Sample ID: PUB1218-OTM-050721-100
**Lab Sample ID: 320-73512-11**
**Date Collected: 05/07/21 10:57**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 261.7 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 16:17 | S1M | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PUB1210-TN-050721-100
## Lab Sample ID: 320-73512-13

**Date Collected: 05/07/21 13:29**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 264 mL | 10.0 mL | 488559 | 05/13/21 04:58 | EG | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 489079 | 05/14/21 16:26 | S1M | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-73512-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Job ID: 320-73512-1
Project/Site: WDNR - Campbell PW Sampling

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-73512-1 | PUB1202-TN-050621-100 | Water | 05/06/21 10:04 | 05/11/21 10:10 | |
| 320-73512-3 | PUB1209-TN-050621-100 | Water | 05/06/21 10:46 | 05/11/21 10:10 | |
| 320-73512-5 | PUB1219-NN-050721-100 | Water | 05/07/21 08:23 | 05/11/21 10:10 | |
| 320-73512-7 | PUB1201-TN-050721-100 | Water | 05/07/21 09:30 | 05/11/21 10:10 | |
| 320-73512-9 | PUB1215-TN-050721-100 | Water | 05/07/21 10:02 | 05/11/21 10:10 | |
| 320-73512-11 | PUB1218-OTM-050721-100 | Water | 05/07/21 10:57 | 05/11/21 10:10 | |
| 320-73512-13 | PUB1210-TN-050721-100 | Water | 05/07/21 13:29 | 05/11/21 10:10 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531605.003 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704166 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73512 Chain of Custody

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PUB1202-TN-050621-100 | 5/6/2021 | 1004 | G | Water | N | N | X | 2 | |
| PUB1202-TN-050621-200 | 5/6/2021 | 925 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1209-TN-050621-100 | 5/6/2021 | 1046 | G | Water | N | N | X | 2 | |
| PUB1209-TN-050621-200 | 5/6/2021 | 1020 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1219-NN-050721-100 | 5/7/2021 | 823 | G | Water | N | N | X | 2 | |
| PUB1219-NN-050721-200 | 5/7/2021 | 759 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1201-TN-050721-100 | 5/7/2021 | 930 | G | Water | N | N | X | 2 | |
| PUB1201-TN-050721-200 | 5/7/2021 | 905 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1215-TN-050721-100 | 5/7/2021 | 1002 | G | Water | N | N | X | 2 | |
| PUB1215-TN-050721-200 | 5/7/2021 | 1008 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1218-OTM-050721-100 | 5/7/2021 | 1057 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: Karina Casey | 5-10-21@1800 | Wood | | 5-11-21 10:10 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1588912/1588913 | Cooler Temperature(s) °C and Other Remarks: 2.2

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531605.004 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 2 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704166 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PUB1218-OTM-050721-200 | 5/7/2021 | 1039 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PUB1210-TN-050721-100 | 5/7/2021 | 1329 | G | Water | N | N | X | 2 | |
| PUB1210-TN-050721-200 | 5/7/2021 | 1305 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 5-10-21 @ 1800 | Wood | | 5-11-21 10:10 | ETA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1588912/1588913 | Cooler Temperature(s) °C and Other Remarks: 2.2 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-73512-1

**Login Number: 73512**
**List Number: 1**
**Creator: Anderson, Marina M**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1588912/1588913 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-72788-2
Client Project/Site: WDNR - Campbell PW Sampling

For:
Wood E&I Solutions Inc
16 N. Carroll Street
Suite 700,
Madison, Wisconsin 53703

Attn: Evan Thomas

*Authorized for release by:*
*6/23/2021 3:19:32 PM*

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

LINKS

Review your project results through TotalAccess

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Qualifiers

### LCMS

| Qualifier | Qualifier Description |
|---|---|
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |
| *5- | Isotope dilution analyte is outside acceptance limits, low biased. |
| *5+ | Isotope dilution analyte is outside acceptance limits, high biased. |
| H | Sample was prepped or analyzed beyond the specified holding time |

## 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 |

## Job ID: 320-72788-2

### Laboratory: Eurofins TestAmerica, Sacramento

**Narrative**

**Receipt**
The samples were received on 4/23/2021 10:00 AM, 4/27/2021 10:00 AM, 4/30/2021 9:50 AM, 5/4/2021 10:10 AM and 5/11/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 29 coolers at receipt time were 0.4º C, 0.4º C, 0.6º C, 0.6º C, 0.6º C, 0.7º C, 0.8º C, 0.8º C, 0.9º C, 1.0º C, 1.0º C, 1.0º C, 1.0º C, 1.1º C, 1.1º C, 1.1º C, 1.3º C, 1.3º C, 1.4º C, 1.4º C, 1.5º C, 1.7º C, 1.9º C, 2.0º C, 2.5º C, 2.6º C, 2.7º C, 3.1º C and 4.8º C.

**LCMS**
Method 537 (modified): The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for preparation batch 320-497006 and analytical batch 320-497754 recovered outside control limits for the following analyte: Perfluoroundecanoic acid (PFUnA). This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 537 (modified): The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for preparation batch 320-497004 and analytical batch 320-497404 recovered outside control limits for the following analyte: Perfluoroundecanoic acid (PFUnA). This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: PWS1047-OS-042221-200 (320-72888-7). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: PWS1047-OS-042221-200 (320-72888-7). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

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

**Organic Prep**
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-496845.

Method 3535: The following samples were prepared outside of preparation holding time due to activation past holding time: PWS1049-OS-042122-200 (320-72888-2), PWS1051-OS-042221-200 (320-72888-5), PWS1047-OS-042221-200 (320-72888-7), PWS1048-OS-042221-200 (320-72888-13), PWS1016-OS-042321-200 (320-72888-37), PWS1041-OS-042321-200 (320-72888-41), PWS1045-OS-042321-200 (320-72888-43), PWS1057-OS-042321-200 (320-72888-45), PWS1058-OS-042321-200 (320-72888-49), PWS1060-OS-042321-200 (320-72888-53), PWS1126-OS-042321-200 (320-72888-66), PWS1107-OS-042321-200 (320-72888-72), PWS1059-OS-042421-200 (320-72888-83), PWS1133-OS-042421-200 (320-72888-104), PWS1053-OS-042521-200 (320-72888-116), PWS1046-OS-042521-200 (320-72888-123), PWS1081-OS-042521-200 (320-72888-125), PWS1154-OS-050621-200 (320-73508-8) and PWS1193-OS-050721-200 (320-73508-14).

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-497004.

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-497006.

Method 3535: The following samples were prepared outside of preparation holding time due to activation past holding time: PWS1004-OS-041921-200 (320-72788-13), PWS1018-OS-041921-200 (320-72788-17), PWS1024-OS-042021-200 (320-72788-38), PWS1027-OS-042021-200 (320-72788-40), PWS1021-OS-042021-200 (320-72788-42), PWS1183-OS-042021-200 (320-72788-61), PWS1184-OS-042121-200 (320-72788-80), PWS1145-OS-042121-200 (320-72788-84), PWS1023-OS-043021-200 (320-73172-48) and PWS1063-OS-050121-200 (320-73172-67).

Method 3535: The following samples were prepared outside of preparation holding time due to activation past holding time: PWS1132-OS-042621-200 (320-73077-2), PWS1105-OS-042621-200 (320-73077-4), PWS1052-OS-042721-200 (320-73077-22), PWS1042-OS-042721-200 (320-73077-24), PWS1066-OS-042721-200 (320-73077-30), PWS1121-OS-042721-200 (320-73077-51),

## Job ID: 320-72788-2 (Continued)

### Laboratory: Eurofins TestAmerica, Sacramento (Continued)

PWS1141-OS-042821-200 (320-73077-62), PWS1050-OS-042821-200 (320-73077-64), PWS1118-OS-042821-200 (320-73077-72) and PWS1084-OS-042821-200 (320-73077-75).

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-497341.

Method 3535: The following sample was prepared outside of preparation holding time due to activation past holding time: PWS1055-OS-042221-200 (320-72888-9).

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

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1004-OS-041921-200** **Lab Sample ID: 320-72788-13**

No Detections.

**Client Sample ID: PWS1018-OS-041921-200** **Lab Sample ID: 320-72788-17**

No Detections.

**Client Sample ID: PWS1024-OS-042021-200** **Lab Sample ID: 320-72788-38**

No Detections.

**Client Sample ID: PWS1027-OS-042021-200** **Lab Sample ID: 320-72788-40**

No Detections.

**Client Sample ID: PWS1021-OS-042021-200** **Lab Sample ID: 320-72788-42**

No Detections.

**Client Sample ID: PWS1183-OS-042021-200** **Lab Sample ID: 320-72788-61**

No Detections.

**Client Sample ID: PWS1184-OS-042121-200** **Lab Sample ID: 320-72788-80**

No Detections.

**Client Sample ID: PWS1145-OS-042121-200** **Lab Sample ID: 320-72788-84**

No Detections.

**Client Sample ID: PWS1049-OS-042122-200** **Lab Sample ID: 320-72888-2**

No Detections.

**Client Sample ID: PWS1051-OS-042221-200** **Lab Sample ID: 320-72888-5**

No Detections.

**Client Sample ID: PWS1047-OS-042221-200** **Lab Sample ID: 320-72888-7**

No Detections.

**Client Sample ID: PWS1055-OS-042221-200** **Lab Sample ID: 320-72888-9**

No Detections.

**Client Sample ID: PWS1048-OS-042221-200** **Lab Sample ID: 320-72888-13**

No Detections.

**Client Sample ID: PWS1016-OS-042321-200** **Lab Sample ID: 320-72888-37**

No Detections.

**Client Sample ID: PWS1041-OS-042321-200** **Lab Sample ID: 320-72888-41**

No Detections.

**Client Sample ID: PWS1045-OS-042321-200** **Lab Sample ID: 320-72888-43**

No Detections.

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1057-OS-042321-200** **Lab Sample ID: 320-72888-45**

No Detections.

**Client Sample ID: PWS1058-OS-042321-200** **Lab Sample ID: 320-72888-49**

No Detections.

**Client Sample ID: PWS1060-OS-042321-200** **Lab Sample ID: 320-72888-53**

No Detections.

**Client Sample ID: PWS1126-OS-042321-200** **Lab Sample ID: 320-72888-66**

No Detections.

**Client Sample ID: PWS1107-OS-042321-200** **Lab Sample ID: 320-72888-72**

No Detections.

**Client Sample ID: PWS1059-OS-042421-200** **Lab Sample ID: 320-72888-83**

No Detections.

**Client Sample ID: PWS1133-OS-042421-200** **Lab Sample ID: 320-72888-104**

No Detections.

**Client Sample ID: PWS1053-OS-042521-200** **Lab Sample ID: 320-72888-116**

No Detections.

**Client Sample ID: PWS1046-OS-042521-200** **Lab Sample ID: 320-72888-123**

No Detections.

**Client Sample ID: PWS1081-OS-042521-200** **Lab Sample ID: 320-72888-125**

No Detections.

**Client Sample ID: PWS1132-OS-042621-200** **Lab Sample ID: 320-73077-2**

No Detections.

**Client Sample ID: PWS1105-OS-042621-200** **Lab Sample ID: 320-73077-4**

No Detections.

**Client Sample ID: PWS1052-OS-042721-200** **Lab Sample ID: 320-73077-22**

No Detections.

**Client Sample ID: PWS1042-OS-042721-200** **Lab Sample ID: 320-73077-24**

No Detections.

**Client Sample ID: PWS1066-OS-042721-200** **Lab Sample ID: 320-73077-30**

No Detections.

**Client Sample ID: PWS1121-OS-042721-200** **Lab Sample ID: 320-73077-51**

No Detections.

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1141-OS-042821-200** **Lab Sample ID: 320-73077-62**

No Detections.

**Client Sample ID: PWS1050-OS-042821-200** **Lab Sample ID: 320-73077-64**

No Detections.

**Client Sample ID: PWS1118-OS-042821-200** **Lab Sample ID: 320-73077-72**

No Detections.

**Client Sample ID: PWS1084-OS-042821-200** **Lab Sample ID: 320-73077-75**

No Detections.

**Client Sample ID: PWS1023-OS-043021-200** **Lab Sample ID: 320-73172-48**

No Detections.

**Client Sample ID: PWS1063-OS-050121-200** **Lab Sample ID: 320-73172-67**

No Detections.

**Client Sample ID: PWS1154-OS-050621-200** **Lab Sample ID: 320-73508-8**

No Detections.

**Client Sample ID: PWS1193-OS-050721-200** **Lab Sample ID: 320-73508-14**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1004-OS-041921-200**
**Lab Sample ID: 320-72788-13**
**Date Collected: 04/19/21 16:58**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.92 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/09/21 12:34 | 06/10/21 23:13 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C5 PFPeA* | *113* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C4 PFHpA* | *109* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |
| *13C2 PFUnA* | *62* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:13* | *1* |

## Client Sample ID: PWS1004-OS-041921-200
**Lab Sample ID: 320-72788-13**

**Date Collected: 04/19/21 16:58**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 97 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C2 PFTeDA | 102 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C2 PFHxDA | 101 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C3 PFBS | 90 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 18O2 PFHxS | 95 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C4 PFOS | 94 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C8 FOSA | 105 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| M2-4:2 FTS | 81 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| M2-6:2 FTS | 81 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| M2-8:2 FTS | 81 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C2 10:2 FTS | 92 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| 13C3 HFPO-DA | 92 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d3-NMeFOSAA | 104 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d5-NEtFOSAA | 109 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d-N-MeFOSA-M | 80 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d-N-EtFOSA-M | 85 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |
| d9-N-EtFOSE-M | 75 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:13 | 1 |

## Client Sample ID: PWS1018-OS-041921-200
**Lab Sample ID: 320-72788-17**

**Date Collected: 04/19/21 18:44**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.95 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1018-OS-041921-200**
**Lab Sample ID: 320-72788-17**
**Date Collected: 04/19/21 18:44**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.84 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.75 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:34 | 06/10/21 23:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C5 PFPeA* | *118* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C4 PFHpA* | *111* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFUnA* | *63* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 PFHxDA* | *90* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C3 PFBS* | *92* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C4 PFOS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *M2-4:2 FTS* | *82* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *M2-6:2 FTS* | *77* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *M2-8:2 FTS* | *76* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C2 10:2 FTS* | *91* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d3-NMeFOSAA* | *101* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d5-NEtFOSAA* | *109* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d-N-EtFOSA-M* | *83* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d7-N-MeFOSE-M* | *95* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |
| *d9-N-EtFOSE-M* | *78* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:23* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1024-OS-042021-200**
**Lab Sample ID: 320-72788-38**
**Date Collected: 04/20/21 12:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.43 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.96 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.50 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.85 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.76 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/09/21 12:34 | 06/10/21 23:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *102* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C5 PFPeA* | *110* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |
| *13C2 PFUnA* | *58* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:32* | *1* |

## Client Sample ID: PWS1024-OS-042021-200
**Lab Sample ID: 320-72788-38**

**Date Collected: 04/20/21 12:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 91 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C2 PFHxDA | 89 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C4 PFOS | 96 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C8 FOSA | 101 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| M2-4:2 FTS | 75 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| M2-6:2 FTS | 84 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| M2-8:2 FTS | 73 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C2 10:2 FTS | 86 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| 13C3 HFPO-DA | 91 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d3-NMeFOSAA | 97 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d5-NEtFOSAA | 107 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d-N-MeFOSA-M | 85 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d-N-EtFOSA-M | 85 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |
| d9-N-EtFOSE-M | 76 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 23:32 | 1 |

## Client Sample ID: PWS1027-OS-042021-200
**Lab Sample ID: 320-72788-40**

**Date Collected: 04/20/21 13:13**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.5 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.44 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.52 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.76 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.8 | 0.98 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.49 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.65 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.79 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.84 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.51 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.48 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.87 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1027-OS-042021-200**
**Date Collected: 04/20/21 13:13**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-40**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.87 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.38 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.78 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NMeFOSAA | ND | H | 4.5 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NEtFOSAA | ND | H | 4.5 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.76 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| 6:2 FTS | ND | H | 4.5 | 2.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.41 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.60 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| F-53B Major | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/09/21 12:34 | 06/10/21 23:42 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C5 PFPeA* | *122* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C4 PFHpA* | *114* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C4 PFOA* | *103* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C5 PFNA* | *113* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFUnA* | *65* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFDoA* | *105* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFTeDA* | *107* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C3 PFBS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C4 PFOS* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *M2-4:2 FTS* | *87* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *M2-6:2 FTS* | *84* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *M2-8:2 FTS* | *77* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C2 10:2 FTS* | *92* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *13C3 HFPO-DA* | *102* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d3-NMeFOSAA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d5-NEtFOSAA* | *115* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d-N-MeFOSA-M* | *83* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d7-N-MeFOSE-M* | *105* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |
| *d9-N-EtFOSE-M* | *80* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:42* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1021-OS-042021-200**
**Lab Sample ID: 320-72788-42**
**Date Collected: 04/20/21 14:03**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.91 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.78 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/09/21 12:34 | 06/11/21 00:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C5 PFPeA* | *107* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C5 PFNA* | *107* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |
| *13C2 PFUnA* | *62* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:19* | *1* |

## Client Sample ID: PWS1021-OS-042021-200
**Lab Sample ID: 320-72788-42**

**Date Collected: 04/20/21 14:03**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 99 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C2 PFTeDA | 102 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 18O2 PFHxS | 91 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C4 PFOS | 95 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C8 FOSA | 104 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| M2-4:2 FTS | 82 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| M2-6:2 FTS | 80 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| M2-8:2 FTS | 77 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C2 10:2 FTS | 88 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d3-NMeFOSAA | 101 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d5-NEtFOSAA | 106 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d-N-MeFOSA-M | 76 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |
| d9-N-EtFOSE-M | 80 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:19 | 1 |

## Client Sample ID: PWS1183-OS-042021-200
**Lab Sample ID: 320-72788-61**

**Date Collected: 04/20/21 14:00**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.43 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.51 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.75 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.27 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.8 | 0.96 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.48 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.64 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.78 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.82 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.26 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.50 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.47 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.32 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.85 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1183-OS-042021-200**
**Date Collected: 04/20/21 14:00**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-61**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.86 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.38 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.76 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.75 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.40 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.59 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| F-53B Major | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.35 | ng/L | | 06/09/21 12:34 | 06/11/21 00:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C5 PFPeA* | *110* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFUnA* | *62* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFTeDA* | *101* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 PFHxDA* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C3 PFBS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C4 PFOS* | *92* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C8 FOSA* | *104* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *M2-6:2 FTS* | *82* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *M2-8:2 FTS* | *74* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C2 10:2 FTS* | *81* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *13C3 HFPO-DA* | *92* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d3-NMeFOSAA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d5-NEtFOSAA* | *119* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d-N-MeFOSA-M* | *84* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d-N-EtFOSA-M* | *81* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |
| *d9-N-EtFOSE-M* | *77* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:29* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1184-OS-042121-200**
**Date Collected: 04/21/21 08:30**
**Date Received: 04/23/21 10:00**

**Lab Sample ID: 320-72788-80**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.5 | 2.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.44 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.52 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.23 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.77 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.8 | 0.99 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.50 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.66 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.80 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.85 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.52 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.49 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.88 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.89 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.39 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.79 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NMeFOSAA | ND | H | 4.5 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NEtFOSAA | ND | H | 4.5 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.3 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.77 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 6:2 FTS | ND | H | 4.5 | 2.3 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.42 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.61 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.4 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/09/21 12:34 | 06/11/21 00:38 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C5 PFPeA* | *110* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |
| *13C2 PFUnA* | *57* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:38* | *1* |

## Client Sample ID: PWS1184-OS-042121-200
**Lab Sample ID: 320-72788-80**

**Date Collected: 04/21/21 08:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 89 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C4 PFOS | 88 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C8 FOSA | 97 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| M2-4:2 FTS | 82 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| M2-6:2 FTS | 69 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| M2-8:2 FTS | 71 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C2 10:2 FTS | 82 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d3-NMeFOSAA | 100 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d5-NEtFOSAA | 103 | | 25 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d-N-MeFOSA-M | 81 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d-N-EtFOSA-M | 83 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d7-N-MeFOSE-M | 98 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |
| d9-N-EtFOSE-M | 72 | | 10 - 150 | 06/09/21 12:34 | 06/11/21 00:38 | 1 |

## Client Sample ID: PWS1145-OS-042121-200
**Lab Sample ID: 320-72788-84**

**Date Collected: 04/21/21 10:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.7 | 2.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.9 | 0.46 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.9 | 0.54 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.9 | 0.23 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.9 | 0.80 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.9 | 0.25 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.9 | 0.29 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.9 | 1.0 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.9 | 0.51 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.9 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.9 | 0.68 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.9 | 0.83 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.9 | 0.88 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.9 | 0.19 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.9 | 0.28 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.9 | 0.53 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.9 | 0.18 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.9 | 0.51 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.9 | 0.35 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.9 | 0.30 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.9 | 0.91 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1145-OS-042121-200**
**Lab Sample ID: 320-72788-84**
**Date Collected: 04/21/21 10:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.9 | 0.92 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NMeFOSA | ND | H | 1.9 | 0.40 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NEtFOSA | ND | H | 1.9 | 0.81 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NMeFOSAA | ND | H | 4.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NEtFOSAA | ND | H | 4.7 | 1.2 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NMeFOSE | ND | H | 3.7 | 1.3 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| NEtFOSE | ND | H | 1.9 | 0.80 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| 4:2 FTS | ND | H | 1.9 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| 6:2 FTS | ND | H | 4.7 | 2.3 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| 8:2 FTS | ND | H | 1.9 | 0.43 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| 10:2 FTS | ND | H | 1.9 | 0.63 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| HFPO-DA (GenX) | ND | H | 3.7 | 1.4 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| F-53B Major | ND | H | 1.9 | 0.22 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| F-53B Minor | ND | H | 1.9 | 0.30 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.9 | 0.37 | ng/L | | 06/09/21 12:34 | 06/11/21 00:47 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C5 PFPeA* | *114* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFUnA* | *59* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFTeDA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C3 PFBS* | *91* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C4 PFOS* | *95* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *M2-4:2 FTS* | *83* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *M2-6:2 FTS* | *80* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *M2-8:2 FTS* | *70* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C2 10:2 FTS* | *85* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *13C3 HFPO-DA* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d3-NMeFOSAA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d5-NEtFOSAA* | *105* | | *25 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d-N-MeFOSA-M* | *78* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d-N-EtFOSA-M* | *76* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |
| *d9-N-EtFOSE-M* | *76* | | *10 - 150* | *06/09/21 12:34* | *06/11/21 00:47* | *1* |

**Client Sample ID: PWS1049-OS-042122-200**
**Lab Sample ID: 320-72888-2**
**Date Collected: 04/22/21 08:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.70 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.91 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.60 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.78 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.80 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.72 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NMeFOSAA | ND | H | 4.1 | 0.99 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NEtFOSAA | ND | H | 4.1 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.70 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 6:2 FTS | ND | H | 4.1 | 2.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/08/21 19:13 | 06/13/21 17:07 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:07* | *1* |

## Client Sample ID: PWS1049-OS-042122-200
**Lab Sample ID: 320-72888-2**

**Date Collected: 04/22/21 08:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 88 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C2 PFHxDA | 106 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C3 PFBS | 95 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 18O2 PFHxS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C4 PFOS | 93 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| M2-4:2 FTS | 106 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| M2-8:2 FTS | 98 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C2 10:2 FTS | 90 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| 13C3 HFPO-DA | 106 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d3-NMeFOSAA | 84 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d5-NEtFOSAA | 85 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d-N-MeFOSA-M | 85 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d-N-EtFOSA-M | 80 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |
| d9-N-EtFOSE-M | 94 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:07 | 1 |

## Client Sample ID: PWS1051-OS-042221-200
**Lab Sample ID: 320-72888-5**

**Date Collected: 04/22/21 11:09**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.43 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.96 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.82 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1051-OS-042221-200**
**Lab Sample ID: 320-72888-5**
**Date Collected: 04/22/21 11:09**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.85 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.76 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 07:52 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C5 PFPeA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C4 PFOA* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C5 PFNA* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFDA* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFUnA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 PFHxDA* | *116* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C3 PFBS* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *18O2 PFHxS* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C4 PFOS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *M2-4:2 FTS* | *108* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *M2-6:2 FTS* | *108* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *M2-8:2 FTS* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C2 10:2 FTS* | *118* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *13C3 HFPO-DA* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d3-NMeFOSAA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d5-NEtFOSAA* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d-N-MeFOSA-M* | *93* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d-N-EtFOSA-M* | *93* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d7-N-MeFOSE-M* | *100* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |
| *d9-N-EtFOSE-M* | *103* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 07:52* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1047-OS-042221-200**
**Lab Sample ID: 320-72888-7**
**Date Collected: 04/22/21 11:58**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.43 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.51 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.24 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.96 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.64 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.82 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.85 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.76 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.0 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/08/21 19:13 | 06/13/21 17:16 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C4 PFHpA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C2 PFDA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |
| *13C2 PFUnA* | *44* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 17:16* | *1* |

## Client Sample ID: PWS1047-OS-042221-200
**Lab Sample ID: 320-72888-7**

**Date Collected: 04/22/21 11:58**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 31 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C2 PFTeDA | 78 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C2 PFHxDA | 100 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C3 PFBS | 97 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 18O2 PFHxS | 101 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C4 PFOS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C8 FOSA | 109 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| M2-4:2 FTS | 125 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| M2-6:2 FTS | 126 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| M2-8:2 FTS | 189 | *5+ | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C2 10:2 FTS | 60 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| 13C3 HFPO-DA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d3-NMeFOSAA | 48 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d5-NEtFOSAA | 23 | *5- | 25 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d-N-MeFOSA-M | 69 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d-N-EtFOSA-M | 38 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d7-N-MeFOSE-M | 74 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |
| d9-N-EtFOSE-M | 39 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 17:16 | 1 |

## Client Sample ID: PWS1055-OS-042221-200
**Lab Sample ID: 320-72888-9**

**Date Collected: 04/22/21 13:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.73 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.95 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.81 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.83 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1055-OS-042221-200**
**Lab Sample ID: 320-72888-9**
**Date Collected: 04/22/21 13:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.84 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.75 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.73 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/10/21 11:58 | 06/12/21 14:15 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C4 PFHpA* | *100* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFUnA* | *108* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 PFHxDA* | *113* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C3 PFBS* | *115* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *18O2 PFHxS* | *96* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C4 PFOS* | *85* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *M2-4:2 FTS* | *105* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *M2-8:2 FTS* | *105* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C2 10:2 FTS* | *108* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *13C3 HFPO-DA* | *98* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d3-NMeFOSAA* | *91* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d5-NEtFOSAA* | *105* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d-N-MeFOSA-M* | *74* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d-N-EtFOSA-M* | *70* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d7-N-MeFOSE-M* | *94* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |
| *d9-N-EtFOSE-M* | *103* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 14:15* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1048-OS-042221-200**
**Lab Sample ID: 320-72888-13**
**Date Collected: 04/22/21 18:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.95 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.83 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.84 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/08/21 19:13 | 06/12/21 08:10 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:10* | *1* |

## Client Sample ID: PWS1048-OS-042221-200
**Lab Sample ID: 320-72888-13**

**Date Collected: 04/22/21 18:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 92 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C2 PFTeDA | 85 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 18O2 PFHxS | 95 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C8 FOSA | 93 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| M2-4:2 FTS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| M2-6:2 FTS | 91 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| M2-8:2 FTS | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C2 10:2 FTS | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| 13C3 HFPO-DA | 97 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d3-NMeFOSAA | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d5-NEtFOSAA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d-N-MeFOSA-M | 85 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d7-N-MeFOSE-M | 87 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |
| d9-N-EtFOSE-M | 90 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:10 | 1 |

## Client Sample ID: PWS1016-OS-042321-200
**Lab Sample ID: 320-72888-37**

**Date Collected: 04/23/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.43 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 0.97 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.65 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.79 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.83 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.86 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1016-OS-042321-200**
**Lab Sample ID: 320-72888-37**
**Date Collected: 04/23/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.87 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.59 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| F-53B Major | ND | H | 1.8 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 08:19 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFDA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C3 PFBS* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *18O2 PFHxS* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C4 PFOS* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *M2-8:2 FTS* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C2 10:2 FTS* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *13C3 HFPO-DA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d3-NMeFOSAA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d5-NEtFOSAA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d-N-MeFOSA-M* | *92* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d-N-EtFOSA-M* | *90* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d7-N-MeFOSE-M* | *91* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |
| *d9-N-EtFOSE-M* | *92* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 08:19* | *1* |

**Client Sample ID: PWS1041-OS-042321-200**
**Lab Sample ID: 320-72888-41**
**Date Collected: 04/23/21 11:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.94 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.62 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.76 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.83 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.84 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.57 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/08/21 19:13 | 06/12/21 08:56 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C4 PFHpA* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C4 PFOA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C2 PFDA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 08:56* | *1* |

## Client Sample ID: PWS1041-OS-042321-200
**Lab Sample ID: 320-72888-41**

**Date Collected: 04/23/21 11:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 103 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C2 PFTeDA | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C2 PFHxDA | 105 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C3 PFBS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 18O2 PFHxS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C4 PFOS | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C8 FOSA | 98 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| M2-4:2 FTS | 109 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| M2-6:2 FTS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| M2-8:2 FTS | 103 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C2 10:2 FTS | 103 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| 13C3 HFPO-DA | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d3-NMeFOSAA | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d5-NEtFOSAA | 109 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d-N-MeFOSA-M | 91 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d-N-EtFOSA-M | 88 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d7-N-MeFOSE-M | 100 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |
| d9-N-EtFOSE-M | 97 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 08:56 | 1 |

## Client Sample ID: PWS1045-OS-042321-200
**Lab Sample ID: 320-72888-43**

**Date Collected: 04/23/21 12:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.43 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 0.97 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.64 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.83 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.85 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1045-OS-042321-200**
**Lab Sample ID: 320-72888-43**
**Date Collected: 04/23/21 12:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.86 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.59 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| F-53B Major | ND | H | 1.8 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 09:05 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C4 PFHpA* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFTeDA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 PFHxDA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C3 PFBS* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *18O2 PFHxS* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C4 PFOS* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C8 FOSA* | *96* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *M2-4:2 FTS* | *114* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *M2-6:2 FTS* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d5-NEtFOSAA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |
| *d9-N-EtFOSE-M* | *98* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:05* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1057-OS-042321-200**
**Date Collected: 04/23/21 13:05**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-45**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.5 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.44 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.52 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.76 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 0.99 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.66 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.84 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.87 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.88 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.39 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NMeFOSAA | ND | H | 4.5 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NEtFOSAA | ND | H | 4.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.76 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 6:2 FTS | ND | H | 4.5 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.60 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/08/21 19:13 | 06/12/21 09:14 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C4 PFHpA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |
| *13C2 PFUnA* | *86* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:14* | *1* |

## Client Sample ID: PWS1057-OS-042321-200
**Lab Sample ID: 320-72888-45**

**Date Collected: 04/23/21 13:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 90 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C2 PFTeDA | 87 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 18O2 PFHxS | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C4 PFOS | 96 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C8 FOSA | 94 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| M2-4:2 FTS | 107 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| M2-8:2 FTS | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C2 10:2 FTS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| 13C3 HFPO-DA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d3-NMeFOSAA | 95 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d5-NEtFOSAA | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d-N-MeFOSA-M | 86 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d-N-EtFOSA-M | 82 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d7-N-MeFOSE-M | 88 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |
| d9-N-EtFOSE-M | 85 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:14 | 1 |

## Client Sample ID: PWS1058-OS-042321-200
**Lab Sample ID: 320-72888-49**

**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.6 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.6 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.6 | 0.69 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.6 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.6 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.6 | 0.90 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.6 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.6 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.6 | 0.60 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.6 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.6 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.6 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.6 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.6 | 0.44 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.6 | 0.30 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.6 | 0.79 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1058-OS-042321-200**
**Lab Sample ID: 320-72888-49**
**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.6 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NMeFOSA | ND | H | 1.6 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NEtFOSA | ND | H | 1.6 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NMeFOSAA | ND | H | 4.1 | 0.98 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NEtFOSAA | ND | H | 4.1 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| NEtFOSE | ND | H | 1.6 | 0.69 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| 4:2 FTS | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| 6:2 FTS | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| 8:2 FTS | ND | H | 1.6 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| 10:2 FTS | ND | H | 1.6 | 0.55 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| F-53B Major | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| F-53B Minor | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.6 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 09:23 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C5 PFPeA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C4 PFHpA* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C4 PFOA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C5 PFNA* | *108* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFDA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFUnA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFDoA* | *87* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFTeDA* | *87* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C3 PFBS* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *18O2 PFHxS* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C4 PFOS* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C8 FOSA* | *103* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *M2-4:2 FTS* | *117* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *M2-6:2 FTS* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *M2-8:2 FTS* | *114* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C2 10:2 FTS* | *109* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *13C3 HFPO-DA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d3-NMeFOSAA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d5-NEtFOSAA* | *108* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d-N-MeFOSA-M* | *90* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d-N-EtFOSA-M* | *89* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d7-N-MeFOSE-M* | *93* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |
| *d9-N-EtFOSE-M* | *98* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:23* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1060-OS-042321-200**
**Lab Sample ID: 320-72888-53**
**Date Collected: 04/23/21 16:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.92 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.75 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.82 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/08/21 19:13 | 06/12/21 09:32 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C5 PFNA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C2 PFDA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:32* | *1* |

## Client Sample ID: PWS1060-OS-042321-200
**Lab Sample ID: 320-72888-53**

**Date Collected: 04/23/21 16:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 93 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C2 PFTeDA | 85 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C2 PFHxDA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C3 PFBS | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 18O2 PFHxS | 103 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C4 PFOS | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C8 FOSA | 98 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| M2-4:2 FTS | 112 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| M2-6:2 FTS | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| M2-8:2 FTS | 109 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C2 10:2 FTS | 105 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| 13C3 HFPO-DA | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d3-NMeFOSAA | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d5-NEtFOSAA | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d-N-MeFOSA-M | 89 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d-N-EtFOSA-M | 87 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |
| d9-N-EtFOSE-M | 101 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:32 | 1 |

## Client Sample ID: PWS1126-OS-042321-200
**Lab Sample ID: 320-72888-66**

**Date Collected: 04/23/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.6 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.53 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.67 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.82 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.86 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.52 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.34 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.89 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1126-OS-042321-200**
**Lab Sample ID: 320-72888-66**
**Date Collected: 04/23/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.90 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NMeFOSAA | ND | H | 4.6 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NEtFOSAA | ND | H | 4.6 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NMeFOSE | ND | H | 3.7 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| 6:2 FTS | ND | H | 4.6 | 2.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.42 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.62 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| HFPO-DA (GenX) | ND | H | 3.7 | 1.4 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.37 | ng/L | | 06/08/21 19:13 | 06/12/21 09:41 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C4 PFHpA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFUnA* | *89* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFDoA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFTeDA* | *84* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C3 PFBS* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *18O2 PFHxS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C4 PFOS* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C8 FOSA* | *98* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *M2-4:2 FTS* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *M2-6:2 FTS* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *M2-8:2 FTS* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C2 10:2 FTS* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *13C3 HFPO-DA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d5-NEtFOSAA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d-N-MeFOSA-M* | *87* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d-N-EtFOSA-M* | *88* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |
| *d9-N-EtFOSE-M* | *99* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 09:41* | *1* |

**Client Sample ID: PWS1107-OS-042321-200**
**Lab Sample ID: 320-72888-72**
**Date Collected: 04/23/21 15:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.6 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.53 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.67 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.81 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.86 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.52 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.34 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.88 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.89 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.39 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.79 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NMeFOSAA | ND | H | 4.6 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NEtFOSAA | ND | H | 4.6 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 6:2 FTS | ND | H | 4.6 | 2.3 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.42 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.61 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.4 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/08/21 19:13 | 06/12/21 09:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C2 PFHxA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C5 PFNA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C2 PFDA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |
| *13C2 PFUnA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 09:50* | *1* |

## Client Sample ID: PWS1107-OS-042321-200
**Lab Sample ID: 320-72888-72**

**Date Collected: 04/23/21 15:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C2 PFTeDA | 89 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C2 PFHxDA | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C3 PFBS | 98 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 18O2 PFHxS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C4 PFOS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C8 FOSA | 103 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| M2-4:2 FTS | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| M2-6:2 FTS | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| M2-8:2 FTS | 109 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C2 10:2 FTS | 110 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| 13C3 HFPO-DA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d3-NMeFOSAA | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d5-NEtFOSAA | 107 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d-N-MeFOSA-M | 90 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d-N-EtFOSA-M | 88 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |
| d9-N-EtFOSE-M | 99 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 09:50 | 1 |

## Client Sample ID: PWS1059-OS-042421-200
**Lab Sample ID: 320-72888-83**

**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.91 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1059-OS-042421-200**
**Lab Sample ID: 320-72888-83**
**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.72 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 10:00 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C4 PFHpA* | *108* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C4 PFOA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C5 PFNA* | *105* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFDA* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFUnA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFDoA* | *89* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFTeDA* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 PFHxDA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C3 PFBS* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *18O2 PFHxS* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C4 PFOS* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C8 FOSA* | *97* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *M2-4:2 FTS* | *134* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *M2-6:2 FTS* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *M2-8:2 FTS* | *117* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C2 10:2 FTS* | *115* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *13C3 HFPO-DA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d3-NMeFOSAA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d5-NEtFOSAA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d-N-MeFOSA-M* | *88* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d-N-EtFOSA-M* | *84* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d7-N-MeFOSE-M* | *92* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:00* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1133-OS-042421-200**
**Lab Sample ID: 320-72888-104**
**Date Collected: 04/24/21 11:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.7 | 2.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.9 | 0.46 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.9 | 0.54 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.9 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.9 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.9 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.9 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.9 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.9 | 0.52 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.9 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.9 | 0.68 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.9 | 0.83 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.9 | 0.88 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.9 | 0.19 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.9 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.9 | 0.53 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.9 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.9 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.9 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.9 | 0.30 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.9 | 0.91 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.9 | 0.92 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NMeFOSA | ND | H | 1.9 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NEtFOSA | ND | H | 1.9 | 0.82 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NMeFOSAA | ND | H | 4.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NEtFOSAA | ND | H | 4.7 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NMeFOSE | ND | H | 3.8 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| NEtFOSE | ND | H | 1.9 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 4:2 FTS | ND | H | 1.9 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 6:2 FTS | ND | H | 4.7 | 2.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 8:2 FTS | ND | H | 1.9 | 0.43 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 10:2 FTS | ND | H | 1.9 | 0.63 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| HFPO-DA (GenX) | ND | H | 3.8 | 1.4 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| F-53B Major | ND | H | 1.9 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| F-53B Minor | ND | H | 1.9 | 0.30 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.9 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 10:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C5 PFPeA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C2 PFHxA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C4 PFHpA* | *116* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C4 PFOA* | *107* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C5 PFNA* | *110* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C2 PFDA* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |
| *13C2 PFUnA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:09* | *1* |

## Client Sample ID: PWS1133-OS-042421-200
**Lab Sample ID: 320-72888-104**

**Date Collected: 04/24/21 11:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C2 PFTeDA | 97 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C2 PFHxDA | 118 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C3 PFBS | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 18O2 PFHxS | 110 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C4 PFOS | 102 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C8 FOSA | 107 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| M2-4:2 FTS | 119 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| M2-6:2 FTS | 108 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| M2-8:2 FTS | 107 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C2 10:2 FTS | 113 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| 13C3 HFPO-DA | 111 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d3-NMeFOSAA | 101 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d5-NEtFOSAA | 112 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d-N-MeFOSA-M | 96 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d-N-EtFOSA-M | 96 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d7-N-MeFOSE-M | 97 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |
| d9-N-EtFOSE-M | 105 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:09 | 1 |

## Client Sample ID: PWS1053-OS-042521-200
**Lab Sample ID: 320-72888-116**

**Date Collected: 04/25/21 08:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.5 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.44 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.52 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.23 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.8 | 0.99 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.66 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.85 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.49 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.87 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1053-OS-042521-200**
**Date Collected: 04/25/21 08:25**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-116**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.88 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.39 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NMeFOSAA | ND | H | 4.5 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NEtFOSAA | ND | H | 4.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| 6:2 FTS | ND | H | 4.5 | 2.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.41 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.60 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.4 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/08/21 19:13 | 06/12/21 10:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFUnA* | *87* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFDoA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFTeDA* | *85* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 PFHxDA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C3 PFBS* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *18O2 PFHxS* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C4 PFOS* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *M2-4:2 FTS* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *M2-6:2 FTS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *M2-8:2 FTS* | *104* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C2 10:2 FTS* | *106* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d5-NEtFOSAA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d-N-MeFOSA-M* | *83* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d-N-EtFOSA-M* | *83* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d7-N-MeFOSE-M* | *94* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 10:18* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1046-OS-042521-200**
**Lab Sample ID: 320-72888-123**
**Date Collected: 04/25/21 11:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.43 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.51 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.24 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.96 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.48 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.64 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.78 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.82 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.85 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.86 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.76 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.0 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.74 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 10:54 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C2 PFHxA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C4 PFOA* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |
| *13C2 PFUnA* | *85* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 10:54* | *1* |

## Client Sample ID: PWS1046-OS-042521-200
**Lab Sample ID: 320-72888-123**

**Date Collected: 04/25/21 11:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C2 PFTeDA | 82 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C3 PFBS | 95 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 18O2 PFHxS | 98 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C4 PFOS | 95 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C8 FOSA | 95 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| M2-4:2 FTS | 114 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| M2-8:2 FTS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C2 10:2 FTS | 106 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| 13C3 HFPO-DA | 99 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d3-NMeFOSAA | 94 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d5-NEtFOSAA | 100 | | 25 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d-N-MeFOSA-M | 88 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d7-N-MeFOSE-M | 94 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |
| d9-N-EtFOSE-M | 93 | | 10 - 150 | 06/08/21 19:13 | 06/12/21 10:54 | 1 |

## Client Sample ID: PWS1081-OS-042521-200
**Lab Sample ID: 320-72888-125**

**Date Collected: 04/25/21 12:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.6 | 0.40 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.6 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.6 | 0.69 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.6 | 0.22 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.6 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.6 | 0.90 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.6 | 0.45 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.6 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.6 | 0.60 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.6 | 0.73 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.6 | 0.77 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.6 | 0.25 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.6 | 0.47 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.6 | 0.44 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.6 | 0.30 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.6 | 0.79 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1081-OS-042521-200**
**Date Collected: 04/25/21 12:20**
**Date Received: 04/27/21 10:00**

**Lab Sample ID: 320-72888-125**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.6 | 0.80 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NMeFOSA | ND | H | 1.6 | 0.35 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NEtFOSA | ND | H | 1.6 | 0.71 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NMeFOSAA | ND | H | 4.1 | 0.98 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NEtFOSAA | ND | H | 4.1 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| NEtFOSE | ND | H | 1.6 | 0.69 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| 4:2 FTS | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| 6:2 FTS | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| 8:2 FTS | ND | H | 1.6 | 0.38 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| 10:2 FTS | ND | H | 1.6 | 0.55 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| F-53B Major | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| F-53B Minor | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.6 | 0.33 | ng/L | | 06/08/21 19:13 | 06/12/21 11:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFDA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFUnA* | *91* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFDoA* | *85* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFTeDA* | *80* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *M2-4:2 FTS* | *131* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *M2-6:2 FTS* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *M2-8:2 FTS* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C2 10:2 FTS* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d3-NMeFOSAA* | *85* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d5-NEtFOSAA* | *92* | | *25 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d-N-EtFOSA-M* | *77* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |
| *d9-N-EtFOSE-M* | *87* | | *10 - 150* | *06/08/21 19:13* | *06/12/21 11:04* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1132-OS-042621-200**
**Lab Sample ID: 320-73077-2**
**Date Collected: 04/26/21 09:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.5 | 2.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.44 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.52 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.77 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.8 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.50 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.66 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.81 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.85 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.52 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.88 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.89 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.39 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.79 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NMeFOSAA | ND | H | 4.5 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NEtFOSAA | ND | H | 4.5 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NMeFOSE | ND | H | 3.6 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.77 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 6:2 FTS | ND | H | 4.5 | 2.3 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.42 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.61 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| HFPO-DA (GenX) | ND | H | 3.6 | 1.4 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| F-53B Major | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.29 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.36 | ng/L | | 06/09/21 12:42 | 06/11/21 11:16 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *100* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C5 PFPeA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C5 PFNA* | *102* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C2 PFDA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |
| *13C2 PFUnA* | *62* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:16* | *1* |

## Client Sample ID: PWS1132-OS-042621-200
**Lab Sample ID: 320-73077-2**

**Date Collected: 04/26/21 09:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 98 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C2 PFTeDA | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C3 PFBS | 93 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 18O2 PFHxS | 94 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C4 PFOS | 98 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C8 FOSA | 101 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| M2-4:2 FTS | 106 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| M2-6:2 FTS | 118 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| M2-8:2 FTS | 112 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d3-NMeFOSAA | 96 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d5-NEtFOSAA | 102 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d-N-MeFOSA-M | 78 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d-N-EtFOSA-M | 77 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d7-N-MeFOSE-M | 93 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |
| d9-N-EtFOSE-M | 64 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:16 | 1 |

## Client Sample ID: PWS1105-OS-042621-200
**Lab Sample ID: 320-73077-4**

**Date Collected: 04/26/21 10:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.93 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.62 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.75 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1105-OS-042621-200**
**Lab Sample ID: 320-73077-4**
**Date Collected: 04/26/21 10:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.83 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.57 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:42 | 06/11/21 11:25 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *81* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C5 PFPeA* | *79* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFHxA* | *73* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C4 PFHpA* | *79* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C4 PFOA* | *79* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C5 PFNA* | *80* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFDA* | *78* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFUnA* | *51* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFDoA* | *82* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFTeDA* | *83* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 PFHxDA* | *76* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C3 PFBS* | *79* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *18O2 PFHxS* | *79* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C4 PFOS* | *83* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C8 FOSA* | *79* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *M2-4:2 FTS* | *82* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *M2-6:2 FTS* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *M2-8:2 FTS* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C2 10:2 FTS* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *13C3 HFPO-DA* | *71* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d3-NMeFOSAA* | *76* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d5-NEtFOSAA* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d-N-MeFOSA-M* | *63* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d-N-EtFOSA-M* | *66* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d7-N-MeFOSE-M* | *74* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |
| *d9-N-EtFOSE-M* | *58* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:25* | *1* |

## Client Sample ID: PWS1052-OS-042721-200
**Lab Sample ID: 320-73077-22**

**Date Collected: 04/27/21 15:06**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.92 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.75 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:42 | 06/11/21 11:35 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C2 PFHxA* | *89* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C4 PFHpA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C5 PFNA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C2 PFDA* | *89* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |
| *13C2 PFUnA* | *61* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:35* | *1* |

## Client Sample ID: PWS1052-OS-042721-200
**Lab Sample ID: 320-73077-22**

**Date Collected: 04/27/21 15:06**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 93 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C2 PFTeDA | 96 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| M2-4:2 FTS | 126 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| M2-6:2 FTS | 115 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| M2-8:2 FTS | 105 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C2 10:2 FTS | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d3-NMeFOSAA | 93 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d5-NEtFOSAA | 97 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d-N-MeFOSA-M | 74 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d-N-EtFOSA-M | 76 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d7-N-MeFOSE-M | 84 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |
| d9-N-EtFOSE-M | 64 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:35 | 1 |

## Client Sample ID: PWS1042-OS-042721-200
**Lab Sample ID: 320-73077-24**

**Date Collected: 04/27/21 16:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.1 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.40 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.70 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.91 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.60 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.78 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.80 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1042-OS-042721-200**
**Date Collected: 04/27/21 16:10**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-24**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.35 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NMeFOSAA | ND | H | 4.1 | 0.99 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NEtFOSAA | ND | H | 4.1 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.70 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| 6:2 FTS | ND | H | 4.1 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.55 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/09/21 12:42 | 06/11/21 11:44 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C4 PFHpA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C4 PFOA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C5 PFNA* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFDA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFUnA* | *63* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFDoA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 PFHxDA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C4 PFOS* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *M2-4:2 FTS* | *114* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *M2-6:2 FTS* | *112* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *M2-8:2 FTS* | *116* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C2 10:2 FTS* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *13C3 HFPO-DA* | *87* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d3-NMeFOSAA* | *93* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d5-NEtFOSAA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d-N-EtFOSA-M* | *77* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |
| *d9-N-EtFOSE-M* | *64* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 11:44* | *1* |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1066-OS-042721-200**
**Date Collected: 04/27/21 18:50**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-30**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.94 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.62 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.76 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.80 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.83 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.57 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:42 | 06/11/21 11:54 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C5 PFPeA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C4 PFHpA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C2 PFDA* | *102* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |
| *13C2 PFUnA* | *67* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 11:54* | *1* |

## Client Sample ID: PWS1066-OS-042721-200
**Lab Sample ID: 320-73077-30**

**Date Collected: 04/27/21 18:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C2 PFTeDA | 103 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C2 PFHxDA | 86 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C3 PFBS | 94 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 18O2 PFHxS | 99 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C4 PFOS | 104 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C8 FOSA | 102 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| M2-4:2 FTS | 137 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| M2-6:2 FTS | 120 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| M2-8:2 FTS | 112 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C2 10:2 FTS | 110 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| 13C3 HFPO-DA | 90 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d3-NMeFOSAA | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d5-NEtFOSAA | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d-N-MeFOSA-M | 82 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |
| d9-N-EtFOSE-M | 68 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 11:54 | 1 |

## Client Sample ID: PWS1121-OS-042721-200
**Lab Sample ID: 320-73077-51**

**Date Collected: 04/27/21 18:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.92 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1121-OS-042721-200**
**Date Collected: 04/27/21 18:05**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-51**
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/09/21 12:42 | 06/11/21 12:03 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C5 PFPeA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFHxA* | *84* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C4 PFHpA* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C4 PFOA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C5 PFNA* | *93* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFDA* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFUnA* | *59* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFDoA* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 PFHxDA* | *89* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C3 PFBS* | *85* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *18O2 PFHxS* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C4 PFOS* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C8 FOSA* | *91* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *M2-6:2 FTS* | *105* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *M2-8:2 FTS* | *103* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C2 10:2 FTS* | *102* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *13C3 HFPO-DA* | *82* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d5-NEtFOSAA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d-N-MeFOSA-M* | *76* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d-N-EtFOSA-M* | *76* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |
| *d9-N-EtFOSE-M* | *64* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:03* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1141-OS-042821-200**
**Lab Sample ID: 320-73077-62**
**Date Collected: 04/28/21 13:54**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.95 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.85 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.75 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/09/21 12:42 | 06/11/21 12:12 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C2 PFHxA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C5 PFNA* | *100* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |
| *13C2 PFUnA* | *63* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:12* | *1* |

## Client Sample ID: PWS1141-OS-042821-200
**Lab Sample ID: 320-73077-62**

**Date Collected: 04/28/21 13:54**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 97 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C2 PFTeDA | 103 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C2 PFHxDA | 93 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C3 PFBS | 92 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 18O2 PFHxS | 96 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C4 PFOS | 100 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C8 FOSA | 97 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| M2-4:2 FTS | 105 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| M2-6:2 FTS | 109 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| M2-8:2 FTS | 117 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C2 10:2 FTS | 106 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| 13C3 HFPO-DA | 89 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d3-NMeFOSAA | 98 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d5-NEtFOSAA | 95 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d-N-MeFOSA-M | 79 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d-N-EtFOSA-M | 79 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d7-N-MeFOSE-M | 87 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |
| d9-N-EtFOSE-M | 66 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:12 | 1 |

## Client Sample ID: PWS1050-OS-042821-200
**Lab Sample ID: 320-73077-64**

**Date Collected: 04/28/21 14:49**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.4 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.8 | 0.43 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.8 | 0.51 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.8 | 0.22 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.8 | 0.75 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.8 | 0.24 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.8 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.8 | 0.97 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.8 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.8 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.8 | 0.64 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.8 | 0.78 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.8 | 0.83 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.8 | 0.18 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.8 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.8 | 0.50 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.8 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.8 | 0.47 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.8 | 0.33 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.8 | 0.85 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

**Client Sample ID: PWS1050-OS-042821-200**
**Date Collected: 04/28/21 14:49**
**Date Received: 04/30/21 09:50**

**Lab Sample ID: 320-73077-64**
**Matrix: Water**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.8 | 0.86 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NMeFOSA | ND | H | 1.8 | 0.38 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NEtFOSA | ND | H | 1.8 | 0.76 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NMeFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NEtFOSAA | ND | H | 4.4 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| NEtFOSE | ND | H | 1.8 | 0.75 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| 4:2 FTS | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| 6:2 FTS | ND | H | 4.4 | 2.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| 8:2 FTS | ND | H | 1.8 | 0.40 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| 10:2 FTS | ND | H | 1.8 | 0.59 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| F-53B Major | ND | H | 1.8 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| F-53B Minor | ND | H | 1.8 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.8 | 0.35 | ng/L | | 06/09/21 12:42 | 06/11/21 12:50 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C5 PFPeA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFHxA* | *87* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C4 PFOA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFUnA* | *62* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFDoA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFTeDA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 PFHxDA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C3 PFBS* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *18O2 PFHxS* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C4 PFOS* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C8 FOSA* | *93* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *M2-6:2 FTS* | *114* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *M2-8:2 FTS* | *104* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C2 10:2 FTS* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *13C3 HFPO-DA* | *83* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d3-NMeFOSAA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d5-NEtFOSAA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d7-N-MeFOSE-M* | *89* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |
| *d9-N-EtFOSE-M* | *63* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 12:50* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1118-OS-042821-200**
**Lab Sample ID: 320-73077-72**
**Date Collected: 04/28/21 09:35**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.7 | 0.93 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.62 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.76 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.80 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.83 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.57 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:42 | 06/11/21 12:59 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C4 PFHpA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C4 PFOA* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C2 PFDA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |
| *13C2 PFUnA* | *63* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 12:59* | *1* |

## Client Sample ID: PWS1118-OS-042821-200
**Lab Sample ID: 320-73077-72**

**Date Collected: 04/28/21 09:35**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 94 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C2 PFTeDA | 98 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C2 PFHxDA | 94 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C3 PFBS | 91 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 18O2 PFHxS | 95 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C4 PFOS | 99 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C8 FOSA | 99 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| M2-4:2 FTS | 116 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| M2-6:2 FTS | 116 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| M2-8:2 FTS | 113 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C2 10:2 FTS | 108 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| 13C3 HFPO-DA | 87 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d3-NMeFOSAA | 95 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d5-NEtFOSAA | 103 | | 25 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d-N-MeFOSA-M | 84 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d-N-EtFOSA-M | 87 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |
| d9-N-EtFOSE-M | 68 | | 10 - 150 | 06/09/21 12:42 | 06/11/21 12:59 | 1 |

## Client Sample ID: PWS1084-OS-042821-200
**Lab Sample ID: 320-73077-75**

**Date Collected: 04/28/21 10:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.7 | 2.3 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.9 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.9 | 0.55 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.9 | 0.24 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.9 | 0.80 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.9 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.9 | 0.29 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H *+ | 1.9 | 1.0 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.9 | 0.52 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.9 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.9 | 0.69 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.9 | 0.84 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.9 | 0.89 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.9 | 0.19 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.9 | 0.28 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.9 | 0.54 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.9 | 0.18 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.9 | 0.51 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.9 | 0.35 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.9 | 0.30 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.9 | 0.91 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1084-OS-042821-200**
**Lab Sample ID: 320-73077-75**
**Date Collected: 04/28/21 10:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.9 | 0.92 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NMeFOSA | ND | H | 1.9 | 0.41 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NEtFOSA | ND | H | 1.9 | 0.82 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NMeFOSAA | ND | H | 4.7 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NEtFOSAA | ND | H | 4.7 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NMeFOSE | ND | H | 3.8 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| NEtFOSE | ND | H | 1.9 | 0.80 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| 4:2 FTS | ND | H | 1.9 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| 6:2 FTS | ND | H | 4.7 | 2.4 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| 8:2 FTS | ND | H | 1.9 | 0.43 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| 10:2 FTS | ND | H | 1.9 | 0.63 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| HFPO-DA (GenX) | ND | H | 3.8 | 1.4 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| F-53B Major | ND | H | 1.9 | 0.23 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| F-53B Minor | ND | H | 1.9 | 0.30 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.9 | 0.38 | ng/L | | 06/09/21 12:42 | 06/11/21 13:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C5 PFPeA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFHxA* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C4 PFHpA* | *96* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C4 PFOA* | *91* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C5 PFNA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFUnA* | *63* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFDoA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFTeDA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 PFHxDA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C3 PFBS* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *18O2 PFHxS* | *89* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C4 PFOS* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C8 FOSA* | *95* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *M2-4:2 FTS* | *109* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *M2-6:2 FTS* | *106* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *M2-8:2 FTS* | *108* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C2 10:2 FTS* | *105* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d3-NMeFOSAA* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d5-NEtFOSAA* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d-N-EtFOSA-M* | *73* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d7-N-MeFOSE-M* | *84* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |
| *d9-N-EtFOSE-M* | *67* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 13:09* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1023-OS-043021-200**
**Lab Sample ID: 320-73172-48**
**Date Collected: 04/30/21 16:54**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.49 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.92 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.75 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.79 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.82 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.73 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NMeFOSE | ND | H | 3.4 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.39 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| HFPO-DA (GenX) | ND | H | 3.4 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.34 | ng/L | | 06/09/21 12:34 | 06/10/21 22:55 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C5 PFPeA* | *114* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C2 PFHxA* | *99* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C4 PFHpA* | *104* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C2 PFDA* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |
| *13C2 PFUnA* | *57* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:55* | *1* |

## Client Sample ID: PWS1023-OS-043021-200
**Lab Sample ID: 320-73172-48**

**Date Collected: 04/30/21 16:54**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 97 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C2 PFTeDA | 106 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C2 PFHxDA | 101 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 18O2 PFHxS | 92 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C4 PFOS | 98 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C8 FOSA | 107 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| M2-4:2 FTS | 93 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| M2-6:2 FTS | 83 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| M2-8:2 FTS | 75 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C2 10:2 FTS | 89 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d3-NMeFOSAA | 104 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d5-NEtFOSAA | 102 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d-N-MeFOSA-M | 84 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d-N-EtFOSA-M | 84 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d7-N-MeFOSE-M | 95 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |
| d9-N-EtFOSE-M | 77 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:55 | 1 |

## Client Sample ID: PWS1063-OS-050121-200
**Lab Sample ID: 320-73172-67**

**Date Collected: 05/01/21 14:05**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.2 | 2.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.41 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.48 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.21 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.22 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.26 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | *+ H | 1.7 | 0.91 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.46 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.61 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.74 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.78 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.25 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.47 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.45 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.31 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1063-OS-050121-200**
**Lab Sample ID: 320-73172-67**
**Date Collected: 05/01/21 14:05**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.81 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.36 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.72 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NMeFOSAA | ND | H | 4.2 | 1.0 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NEtFOSAA | ND | H | 4.2 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.71 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| 6:2 FTS | ND | H | 4.2 | 2.1 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.38 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.56 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| F-53B Major | ND | H | 1.7 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.33 | ng/L | | 06/09/21 12:34 | 06/10/21 23:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C5 PFPeA* | *113* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFHxA* | *100* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C5 PFNA* | *104* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFDA* | *86* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFUnA* | *58* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFDoA* | *92* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFTeDA* | *102* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 PFHxDA* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C3 PFBS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *18O2 PFHxS* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C4 PFOS* | *97* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C8 FOSA* | *100* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *M2-4:2 FTS* | *85* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *M2-6:2 FTS* | *83* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *M2-8:2 FTS* | *70* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C2 10:2 FTS* | *86* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *13C3 HFPO-DA* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d3-NMeFOSAA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d5-NEtFOSAA* | *109* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d-N-MeFOSA-M* | *77* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d7-N-MeFOSE-M* | *96* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |
| *d9-N-EtFOSE-M* | *75* | | *10 - 150* | *06/09/21 12:34* | *06/10/21 23:04* | *1* |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1154-OS-050621-200**
**Lab Sample ID: 320-73508-8**
**Date Collected: 05/06/21 16:50**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.1 | 2.0 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.6 | 0.40 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.6 | 0.48 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.6 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.6 | 0.70 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.6 | 0.22 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.6 | 0.91 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.6 | 0.45 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.6 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.6 | 0.60 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.6 | 0.73 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.6 | 0.77 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.6 | 0.25 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.6 | 0.47 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.6 | 0.16 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.6 | 0.44 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.6 | 0.30 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.6 | 0.80 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.6 | 0.81 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NMeFOSA | ND | H | 1.6 | 0.35 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NEtFOSA | ND | H | 1.6 | 0.72 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NMeFOSAA | ND | H | 4.1 | 0.99 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NEtFOSAA | ND | H | 4.1 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NMeFOSE | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| NEtFOSE | ND | H | 1.6 | 0.70 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 4:2 FTS | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 6:2 FTS | ND | H | 4.1 | 2.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 8:2 FTS | ND | H | 1.6 | 0.38 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 10:2 FTS | ND | H | 1.6 | 0.55 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| HFPO-DA (GenX) | ND | H | 3.3 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| F-53B Major | ND | H | 1.6 | 0.20 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| F-53B Minor | ND | H | 1.6 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.6 | 0.33 | ng/L | | 06/08/21 19:13 | 06/13/21 16:49 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C2 PFHxA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C2 PFDA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |
| *13C2 PFUnA* | *86* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:49* | *1* |

## Client Sample ID: PWS1154-OS-050621-200
**Lab Sample ID: 320-73508-8**

**Date Collected: 05/06/21 16:50**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDoA | 79 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C2 PFTeDA | 77 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C2 PFHxDA | 107 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C3 PFBS | 87 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 18O2 PFHxS | 93 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C4 PFOS | 90 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C8 FOSA | 91 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| M2-4:2 FTS | 140 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| M2-6:2 FTS | 99 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| M2-8:2 FTS | 108 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C2 10:2 FTS | 97 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| 13C3 HFPO-DA | 99 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d3-NMeFOSAA | 82 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d5-NEtFOSAA | 81 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d-N-MeFOSA-M | 84 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d-N-EtFOSA-M | 82 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d7-N-MeFOSE-M | 96 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |
| d9-N-EtFOSE-M | 89 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:49 | 1 |

## Client Sample ID: PWS1193-OS-050721-200
**Lab Sample ID: 320-73508-14**

**Date Collected: 05/07/21 12:11**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | H | 4.3 | 2.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | H | 1.7 | 0.42 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | H | 1.7 | 0.50 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | H | 1.7 | 0.22 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorononanoic acid (PFNA) | ND | H | 1.7 | 0.23 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | H | 1.7 | 0.27 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | H | 1.7 | 0.95 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | H | 1.7 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | H | 1.7 | 0.63 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | H | 1.7 | 0.77 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | H | 1.7 | 0.81 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | H | 1.7 | 0.17 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | H | 1.7 | 0.26 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | H | 1.7 | 0.49 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | H | 1.7 | 0.16 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | H | 1.7 | 0.47 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | H | 1.7 | 0.32 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | H | 1.7 | 0.84 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

**Client Sample ID: PWS1193-OS-050721-200**
**Lab Sample ID: 320-73508-14**
**Date Collected: 05/07/21 12:11**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonamide (FOSA) | ND | H | 1.7 | 0.85 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NMeFOSA | ND | H | 1.7 | 0.37 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NEtFOSA | ND | H | 1.7 | 0.75 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NMeFOSAA | ND | H | 4.3 | 1.0 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NEtFOSAA | ND | H | 4.3 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NMeFOSE | ND | H | 3.5 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| NEtFOSE | ND | H | 1.7 | 0.73 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| 4:2 FTS | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| 6:2 FTS | ND | H | 4.3 | 2.2 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| 8:2 FTS | ND | H | 1.7 | 0.40 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| 10:2 FTS | ND | H | 1.7 | 0.58 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| HFPO-DA (GenX) | ND | H | 3.5 | 1.3 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| F-53B Major | ND | H | 1.7 | 0.21 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| F-53B Minor | ND | H | 1.7 | 0.28 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | H | 1.7 | 0.35 | ng/L | | 06/08/21 19:13 | 06/13/21 16:58 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C5 PFPeA* | *96* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFHxA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C4 PFOA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFUnA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFDoA* | *93* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFTeDA* | *82* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 PFHxDA* | *102* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C3 PFBS* | *89* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C4 PFOS* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C8 FOSA* | *90* | | *10 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *M2-4:2 FTS* | *134* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *M2-6:2 FTS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C2 10:2 FTS* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *13C3 HFPO-DA* | *100* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d3-NMeFOSAA* | *83* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d5-NEtFOSAA* | *90* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d-N-MeFOSA-M* | *86* | | *10 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d-N-EtFOSA-M* | *85* | | *10 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |
| *d9-N-EtFOSE-M* | *88* | | *10 - 150* | *06/08/21 19:13* | *06/13/21 16:58* | *1* |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| 320-72788-13 | PWS1004-OS-041921-200 | 101 | 113 | 97 | 109 | 95 | 106 | 95 | 62 |
| 320-72788-17 | PWS1018-OS-041921-200 | 100 | 118 | 98 | 111 | 101 | 106 | 97 | 63 |
| 320-72788-38 | PWS1024-OS-042021-200 | 102 | 110 | 97 | 106 | 95 | 100 | 96 | 58 |
| 320-72788-40 | PWS1027-OS-042021-200 | 106 | 122 | 99 | 114 | 103 | 113 | 98 | 65 |
| 320-72788-42 | PWS1021-OS-042021-200 | 100 | 107 | 96 | 104 | 96 | 107 | 95 | 62 |
| 320-72788-61 | PWS1183-OS-042021-200 | 100 | 110 | 101 | 107 | 98 | 100 | 97 | 62 |
| 320-72788-80 | PWS1184-OS-042121-200 | 99 | 110 | 96 | 103 | 96 | 100 | 89 | 57 |
| 320-72788-84 | PWS1145-OS-042121-200 | 98 | 114 | 97 | 110 | 95 | 104 | 91 | 59 |
| 320-72888-2 | PWS1049-OS-042122-200 | 100 | 99 | 98 | 110 | 97 | 102 | 96 | 91 |
| 320-72888-5 | PWS1051-OS-042221-200 | 107 | 105 | 100 | 110 | 107 | 109 | 109 | 98 |
| 320-72888-7 | PWS1047-OS-042221-200 | 104 | 101 | 99 | 105 | 102 | 106 | 102 | 44 |
| 320-72888-9 | PWS1055-OS-042221-200 | 100 | 96 | 101 | 100 | 100 | 102 | 98 | 108 |
| 320-72888-13 | PWS1048-OS-042221-200 | 93 | 94 | 92 | 99 | 95 | 99 | 90 | 87 |
| 320-72888-37 | PWS1016-OS-042321-200 | 98 | 101 | 94 | 102 | 100 | 104 | 100 | 91 |
| 320-72888-41 | PWS1041-OS-042321-200 | 99 | 97 | 98 | 110 | 100 | 104 | 104 | 94 |
| 320-72888-43 | PWS1045-OS-042321-200 | 99 | 99 | 97 | 107 | 104 | 104 | 94 | 87 |
| 320-72888-45 | PWS1057-OS-042321-200 | 96 | 99 | 95 | 105 | 99 | 102 | 96 | 86 |
| 320-72888-49 | PWS1058-OS-042321-200 | 103 | 103 | 100 | 109 | 104 | 108 | 102 | 102 |
| 320-72888-53 | PWS1060-OS-042321-200 | 94 | 99 | 100 | 106 | 102 | 106 | 97 | 92 |
| 320-72888-66 | PWS1126-OS-042321-200 | 92 | 97 | 96 | 102 | 94 | 100 | 91 | 89 |
| 320-72888-72 | PWS1107-OS-042321-200 | 99 | 94 | 96 | 106 | 102 | 105 | 102 | 100 |
| 320-72888-83 | PWS1059-OS-042421-200 | 105 | 101 | 101 | 108 | 102 | 105 | 107 | 92 |
| 320-72888-104 | PWS1133-OS-042421-200 | 104 | 106 | 102 | 116 | 107 | 110 | 106 | 97 |
| 320-72888-116 | PWS1053-OS-042521-200 | 97 | 94 | 94 | 101 | 96 | 99 | 93 | 87 |
| 320-72888-123 | PWS1046-OS-042521-200 | 95 | 99 | 95 | 103 | 101 | 102 | 95 | 85 |
| 320-72888-125 | PWS1081-OS-042521-200 | 91 | 91 | 94 | 99 | 93 | 102 | 96 | 91 |
| 320-73077-2 | PWS1132-OS-042621-200 | 100 | 101 | 92 | 101 | 93 | 102 | 98 | 62 |
| 320-73077-4 | PWS1105-OS-042621-200 | 81 | 79 | 73 | 79 | 79 | 80 | 78 | 51 |
| 320-73077-22 | PWS1052-OS-042721-200 | 94 | 91 | 89 | 92 | 93 | 92 | 89 | 61 |
| 320-73077-24 | PWS1042-OS-042721-200 | 94 | 95 | 92 | 97 | 94 | 96 | 91 | 63 |
| 320-73077-30 | PWS1066-OS-042721-200 | 101 | 99 | 94 | 101 | 99 | 99 | 102 | 67 |
| 320-73077-51 | PWS1121-OS-042721-200 | 91 | 91 | 84 | 90 | 92 | 93 | 88 | 59 |
| 320-73077-62 | PWS1141-OS-042821-200 | 95 | 94 | 92 | 98 | 99 | 100 | 99 | 63 |
| 320-73077-64 | PWS1050-OS-042821-200 | 95 | 94 | 87 | 98 | 95 | 95 | 90 | 62 |
| 320-73077-72 | PWS1118-OS-042821-200 | 96 | 96 | 90 | 91 | 96 | 95 | 95 | 63 |
| 320-73077-75 | PWS1084-OS-042821-200 | 94 | 97 | 90 | 96 | 91 | 95 | 93 | 63 |
| 320-73172-48 | PWS1023-OS-043021-200 | 106 | 114 | 99 | 104 | 98 | 103 | 94 | 57 |
| 320-73172-67 | PWS1063-OS-050121-200 | 98 | 113 | 100 | 106 | 97 | 104 | 86 | 58 |
| 320-73508-8 | PWS1154-OS-050621-200 | 94 | 96 | 97 | 99 | 98 | 99 | 93 | 86 |
| 320-73508-14 | PWS1193-OS-050721-200 | 99 | 96 | 98 | 103 | 97 | 99 | 99 | 94 |
| LCS 320-496845/2-A | Lab Control Sample | 99 | 100 | 97 | 103 | 104 | 103 | 95 | 92 |
| LCS 320-497004/2-A | Lab Control Sample | 108 | 123 | 103 | 111 | 96 | 108 | 94 | 62 |
| LCS 320-497006/2-A | Lab Control Sample | 102 | 103 | 96 | 100 | 99 | 95 | 97 | 64 |
| LCS 320-497341/2-A | Lab Control Sample | 98 | 98 | 101 | 103 | 104 | 102 | 100 | 99 |
| LCSD 320-496845/3-A | Lab Control Sample Dup | 103 | 101 | 98 | 103 | 99 | 104 | 97 | 85 |
| LCSD 320-497004/3-A | Lab Control Sample Dup | 107 | 118 | 101 | 110 | 101 | 105 | 97 | 64 |
| LCSD 320-497006/3-A | Lab Control Sample Dup | 98 | 97 | 93 | 98 | 95 | 97 | 97 | 61 |
| LCSD 320-497341/3-A | Lab Control Sample Dup | 101 | 99 | 105 | 102 | 102 | 105 | 99 | 106 |
| MB 320-496845/1-A | Method Blank | 95 | 98 | 94 | 99 | 99 | 97 | 92 | 87 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFBA (25-150) | PFPeA (25-150) | PFHxA (25-150) | C4PFHA (25-150) | PFOA (25-150) | PFNA (25-150) | PFDA (25-150) | PFUnA (25-150) |
| MB 320-497004/1-A | Method Blank | 98 | 112 | 94 | 103 | 93 | 99 | 90 | 59 |
| MB 320-497006/1-A | Method Blank | 97 | 95 | 85 | 98 | 98 | 97 | 92 | 61 |
| MB 320-497341/1-A | Method Blank | 99 | 98 | 101 | 106 | 103 | 103 | 99 | 104 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| 320-72788-13 | PWS1004-OS-041921-200 | 97 | 102 | 101 | 90 | 95 | 94 | 105 | 81 |
| 320-72788-17 | PWS1018-OS-041921-200 | 95 | 100 | 90 | 92 | 93 | 93 | 103 | 82 |
| 320-72788-38 | PWS1024-OS-042021-200 | 91 | 97 | 89 | 87 | 93 | 96 | 101 | 75 |
| 320-72788-40 | PWS1027-OS-042021-200 | 105 | 107 | 97 | 93 | 94 | 100 | 103 | 87 |
| 320-72788-42 | PWS1021-OS-042021-200 | 99 | 102 | 94 | 91 | 91 | 95 | 104 | 82 |
| 320-72788-61 | PWS1183-OS-042021-200 | 97 | 101 | 93 | 93 | 93 | 92 | 104 | 85 |
| 320-72788-80 | PWS1184-OS-042121-200 | 89 | 97 | 86 | 89 | 88 | 88 | 97 | 82 |
| 320-72788-84 | PWS1145-OS-042121-200 | 94 | 100 | 95 | 91 | 89 | 95 | 103 | 83 |
| 320-72888-2 | PWS1049-OS-042122-200 | 88 | 83 | 106 | 95 | 99 | 93 | 91 | 106 |
| 320-72888-5 | PWS1051-OS-042221-200 | 95 | 90 | 116 | 100 | 107 | 101 | 101 | 108 |
| 320-72888-7 | PWS1047-OS-042221-200 | 31 | 78 | 100 | 97 | 101 | 99 | 109 | 125 |
| 320-72888-9 | PWS1055-OS-042221-200 | 96 | 90 | 113 | 115 | 96 | 85 | 100 | 105 |
| 320-72888-13 | PWS1048-OS-042221-200 | 92 | 85 | 93 | 94 | 95 | 90 | 93 | 99 |
| 320-72888-37 | PWS1016-OS-042321-200 | 97 | 83 | 103 | 96 | 98 | 96 | 101 | 106 |
| 320-72888-41 | PWS1041-OS-042321-200 | 103 | 94 | 105 | 99 | 104 | 100 | 98 | 109 |
| 320-72888-43 | PWS1045-OS-042321-200 | 92 | 92 | 103 | 95 | 99 | 93 | 96 | 114 |
| 320-72888-45 | PWS1057-OS-042321-200 | 90 | 87 | 93 | 94 | 100 | 96 | 94 | 107 |
| 320-72888-49 | PWS1058-OS-042321-200 | 87 | 87 | 98 | 98 | 106 | 102 | 103 | 117 |
| 320-72888-53 | PWS1060-OS-042321-200 | 93 | 85 | 101 | 100 | 103 | 100 | 98 | 112 |
| 320-72888-66 | PWS1126-OS-042321-200 | 91 | 84 | 98 | 98 | 101 | 93 | 98 | 104 |
| 320-72888-72 | PWS1107-OS-042321-200 | 100 | 89 | 104 | 98 | 104 | 99 | 103 | 101 |
| 320-72888-83 | PWS1059-OS-042421-200 | 89 | 90 | 102 | 97 | 103 | 99 | 97 | 134 |
| 320-72888-104 | PWS1133-OS-042421-200 | 99 | 97 | 118 | 102 | 110 | 102 | 107 | 119 |
| 320-72888-116 | PWS1053-OS-042521-200 | 91 | 85 | 99 | 95 | 99 | 95 | 95 | 102 |
| 320-72888-123 | PWS1046-OS-042521-200 | 94 | 82 | 93 | 95 | 98 | 95 | 95 | 114 |
| 320-72888-125 | PWS1081-OS-042521-200 | 85 | 80 | 92 | 90 | 93 | 90 | 90 | 131 |
| 320-73077-2 | PWS1132-OS-042621-200 | 98 | 100 | 94 | 93 | 94 | 98 | 101 | 106 |
| 320-73077-4 | PWS1105-OS-042621-200 | 82 | 83 | 76 | 79 | 79 | 83 | 79 | 82 |
| 320-73077-22 | PWS1052-OS-042721-200 | 93 | 96 | 86 | 87 | 88 | 92 | 91 | 126 |
| 320-73077-24 | PWS1042-OS-042721-200 | 94 | 97 | 92 | 88 | 94 | 94 | 93 | 114 |
| 320-73077-30 | PWS1066-OS-042721-200 | 100 | 103 | 86 | 94 | 99 | 104 | 102 | 137 |
| 320-73077-51 | PWS1121-OS-042721-200 | 90 | 97 | 89 | 85 | 88 | 91 | 91 | 106 |
| 320-73077-62 | PWS1141-OS-042821-200 | 97 | 103 | 93 | 92 | 96 | 100 | 97 | 105 |
| 320-73077-64 | PWS1050-OS-042821-200 | 97 | 101 | 97 | 88 | 96 | 94 | 93 | 106 |
| 320-73077-72 | PWS1118-OS-042821-200 | 94 | 98 | 94 | 91 | 95 | 99 | 99 | 116 |
| 320-73077-75 | PWS1084-OS-042821-200 | 95 | 99 | 95 | 94 | 89 | 97 | 95 | 109 |
| 320-73172-48 | PWS1023-OS-043021-200 | 97 | 106 | 101 | 89 | 92 | 98 | 107 | 93 |
| 320-73172-67 | PWS1063-OS-050121-200 | 92 | 102 | 94 | 93 | 93 | 97 | 100 | 85 |
| 320-73508-8 | PWS1154-OS-050621-200 | 79 | 77 | 107 | 87 | 93 | 90 | 91 | 140 |
| 320-73508-14 | PWS1193-OS-050721-200 | 93 | 82 | 102 | 89 | 94 | 90 | 90 | 134 |
| LCS 320-496845/2-A | Lab Control Sample | 99 | 87 | 117 | 99 | 102 | 100 | 93 | 106 |
| LCS 320-497004/2-A | Lab Control Sample | 95 | 100 | 100 | 96 | 102 | 100 | 97 | 85 |
| LCS 320-497006/2-A | Lab Control Sample | 98 | 104 | 100 | 96 | 101 | 101 | 103 | 107 |
| LCS 320-497341/2-A | Lab Control Sample | 99 | 86 | 106 | 119 | 103 | 87 | 94 | 108 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | PFDoA (25-150) | PFTDA (25-150) | PFHxDA (25-150) | C3PFBS (25-150) | PFHxS (25-150) | PFOS (25-150) | PFOSA (10-150) | M242FTS (25-150) |
| LCSD 320-496845/3-A | Lab Control Sample Dup | 89 | 82 | 100 | 93 | 101 | 95 | 90 | 109 |
| LCSD 320-497004/3-A | Lab Control Sample Dup | 97 | 102 | 97 | 94 | 96 | 98 | 99 | 74 |
| LCSD 320-497006/3-A | Lab Control Sample Dup | 98 | 102 | 93 | 95 | 100 | 102 | 94 | 106 |
| LCSD 320-497341/3-A | Lab Control Sample Dup | 103 | 97 | 110 | 119 | 105 | 90 | 102 | 103 |
| MB 320-496845/1-A | Method Blank | 84 | 83 | 102 | 89 | 94 | 92 | 88 | 104 |
| MB 320-497004/1-A | Method Blank | 96 | 98 | 91 | 82 | 88 | 92 | 103 | 78 |
| MB 320-497006/1-A | Method Blank | 99 | 97 | 89 | 90 | 94 | 102 | 92 | 109 |
| MB 320-497341/1-A | Method Blank | 96 | 89 | 98 | 113 | 107 | 89 | 101 | 106 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-72788-13 | PWS1004-OS-041921-200 | 81 | 81 | 92 | 92 | 104 | 109 | 80 | 85 |
| 320-72788-17 | PWS1018-OS-041921-200 | 77 | 76 | 91 | 93 | 101 | 109 | 80 | 83 |
| 320-72788-38 | PWS1024-OS-042021-200 | 84 | 73 | 86 | 91 | 97 | 107 | 85 | 85 |
| 320-72788-40 | PWS1027-OS-042021-200 | 84 | 77 | 92 | 102 | 106 | 115 | 83 | 86 |
| 320-72788-42 | PWS1021-OS-042021-200 | 80 | 77 | 88 | 93 | 101 | 106 | 76 | 77 |
| 320-72788-61 | PWS1183-OS-042021-200 | 82 | 74 | 81 | 92 | 100 | 119 | 84 | 81 |
| 320-72788-80 | PWS1184-OS-042121-200 | 69 | 71 | 82 | 89 | 100 | 103 | 81 | 83 |
| 320-72788-84 | PWS1145-OS-042121-200 | 80 | 70 | 85 | 93 | 100 | 105 | 78 | 76 |
| 320-72888-2 | PWS1049-OS-042122-200 | 102 | 98 | 90 | 106 | 84 | 85 | 85 | 80 |
| 320-72888-5 | PWS1051-OS-042221-200 | 108 | 110 | 118 | 109 | 99 | 109 | 93 | 93 |
| 320-72888-7 | PWS1047-OS-042221-200 | 126 | 189 *5+ | 60 | 101 | 48 | 23 *5- | 69 | 38 |
| 320-72888-9 | PWS1055-OS-042221-200 | 100 | 105 | 108 | 98 | 91 | 105 | 74 | 70 |
| 320-72888-13 | PWS1048-OS-042221-200 | 91 | 94 | 101 | 97 | 94 | 101 | 85 | 84 |
| 320-72888-37 | PWS1016-OS-042321-200 | 100 | 98 | 110 | 100 | 99 | 105 | 92 | 90 |
| 320-72888-41 | PWS1041-OS-042321-200 | 104 | 103 | 103 | 102 | 100 | 109 | 91 | 88 |
| 320-72888-43 | PWS1045-OS-042321-200 | 102 | 101 | 104 | 101 | 93 | 96 | 88 | 86 |
| 320-72888-45 | PWS1057-OS-042321-200 | 102 | 94 | 104 | 101 | 95 | 94 | 86 | 82 |
| 320-72888-49 | PWS1058-OS-042321-200 | 103 | 114 | 109 | 106 | 100 | 108 | 90 | 89 |
| 320-72888-53 | PWS1060-OS-042321-200 | 102 | 109 | 105 | 104 | 100 | 102 | 89 | 87 |
| 320-72888-66 | PWS1126-OS-042321-200 | 100 | 106 | 104 | 96 | 93 | 101 | 87 | 88 |
| 320-72888-72 | PWS1107-OS-042321-200 | 100 | 109 | 110 | 101 | 99 | 107 | 90 | 88 |
| 320-72888-83 | PWS1059-OS-042421-200 | 107 | 117 | 115 | 103 | 98 | 100 | 88 | 84 |
| 320-72888-104 | PWS1133-OS-042421-200 | 108 | 107 | 113 | 111 | 101 | 112 | 96 | 96 |
| 320-72888-116 | PWS1053-OS-042521-200 | 101 | 104 | 106 | 101 | 94 | 102 | 83 | 83 |
| 320-72888-123 | PWS1046-OS-042521-200 | 99 | 104 | 106 | 99 | 94 | 100 | 88 | 84 |
| 320-72888-125 | PWS1081-OS-042521-200 | 95 | 98 | 102 | 94 | 85 | 92 | 80 | 77 |
| 320-73077-2 | PWS1132-OS-042621-200 | 118 | 112 | 108 | 93 | 96 | 102 | 78 | 77 |
| 320-73077-4 | PWS1105-OS-042621-200 | 91 | 95 | 90 | 71 | 76 | 88 | 63 | 66 |
| 320-73077-22 | PWS1052-OS-042721-200 | 115 | 105 | 100 | 89 | 93 | 97 | 74 | 76 |
| 320-73077-24 | PWS1042-OS-042721-200 | 112 | 116 | 99 | 87 | 93 | 97 | 77 | 77 |
| 320-73077-30 | PWS1066-OS-042721-200 | 120 | 112 | 110 | 90 | 100 | 100 | 82 | 84 |
| 320-73077-51 | PWS1121-OS-042721-200 | 105 | 103 | 102 | 82 | 94 | 98 | 76 | 76 |
| 320-73077-62 | PWS1141-OS-042821-200 | 109 | 117 | 106 | 89 | 98 | 95 | 79 | 79 |
| 320-73077-64 | PWS1050-OS-042821-200 | 114 | 104 | 97 | 83 | 92 | 101 | 79 | 79 |
| 320-73077-72 | PWS1118-OS-042821-200 | 116 | 113 | 108 | 87 | 95 | 103 | 84 | 87 |
| 320-73077-75 | PWS1084-OS-042821-200 | 106 | 108 | 105 | 88 | 94 | 101 | 73 | 73 |
| 320-73172-48 | PWS1023-OS-043021-200 | 83 | 75 | 89 | 93 | 104 | 102 | 84 | 84 |
| 320-73172-67 | PWS1063-OS-050121-200 | 83 | 70 | 86 | 94 | 98 | 109 | 77 | 79 |
| 320-73508-8 | PWS1154-OS-050621-200 | 99 | 108 | 97 | 99 | 82 | 81 | 84 | 82 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | M262FTS (25-150) | M282FTS (25-150) | M102FTS (25-150) | HFPODA (25-150) | d3NMFOS (25-150) | d5NEFOS (25-150) | dMeFOSA (10-150) | dEtFOSA (10-150) |
| 320-73508-14 | PWS1193-OS-050721-200 | 101 | 101 | 95 | 100 | 83 | 90 | 86 | 85 |
| LCS 320-496845/2-A | Lab Control Sample | 95 | 105 | 97 | 102 | 88 | 84 | 89 | 86 |
| LCS 320-497004/2-A | Lab Control Sample | 73 | 69 | 82 | 95 | 107 | 102 | 75 | 80 |
| LCS 320-497006/2-A | Lab Control Sample | 106 | 108 | 103 | 91 | 99 | 102 | 78 | 78 |
| LCS 320-497341/2-A | Lab Control Sample | 104 | 107 | 111 | 99 | 98 | 101 | 73 | 72 |
| LCSD 320-496845/3-A | Lab Control Sample Dup | 93 | 112 | 105 | 101 | 88 | 87 | 80 | 80 |
| LCSD 320-497004/3-A | Lab Control Sample Dup | 79 | 73 | 83 | 102 | 109 | 108 | 83 | 78 |
| LCSD 320-497006/3-A | Lab Control Sample Dup | 116 | 106 | 98 | 90 | 101 | 98 | 79 | 77 |
| LCSD 320-497341/3-A | Lab Control Sample Dup | 105 | 105 | 114 | 103 | 101 | 105 | 77 | 75 |
| MB 320-496845/1-A | Method Blank | 96 | 90 | 92 | 102 | 83 | 85 | 73 | 72 |
| MB 320-497004/1-A | Method Blank | 74 | 67 | 86 | 93 | 99 | 108 | 71 | 74 |
| MB 320-497006/1-A | Method Blank | 119 | 101 | 95 | 88 | 95 | 103 | 75 | 75 |
| MB 320-497341/1-A | Method Blank | 121 | 112 | 116 | 101 | 100 | 107 | 79 | 79 |

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) |
| 320-72788-13 | PWS1004-OS-041921-200 | 96 | 75 |
| 320-72788-17 | PWS1018-OS-041921-200 | 95 | 78 |
| 320-72788-38 | PWS1024-OS-042021-200 | 97 | 76 |
| 320-72788-40 | PWS1027-OS-042021-200 | 105 | 80 |
| 320-72788-42 | PWS1021-OS-042021-200 | 96 | 80 |
| 320-72788-61 | PWS1183-OS-042021-200 | 96 | 77 |
| 320-72788-80 | PWS1184-OS-042121-200 | 98 | 72 |
| 320-72788-84 | PWS1145-OS-042121-200 | 97 | 76 |
| 320-72888-2 | PWS1049-OS-042122-200 | 100 | 94 |
| 320-72888-5 | PWS1051-OS-042221-200 | 100 | 103 |
| 320-72888-7 | PWS1047-OS-042221-200 | 74 | 39 |
| 320-72888-9 | PWS1055-OS-042221-200 | 94 | 103 |
| 320-72888-13 | PWS1048-OS-042221-200 | 87 | 90 |
| 320-72888-37 | PWS1016-OS-042321-200 | 91 | 92 |
| 320-72888-41 | PWS1041-OS-042321-200 | 100 | 97 |
| 320-72888-43 | PWS1045-OS-042321-200 | 96 | 98 |
| 320-72888-45 | PWS1057-OS-042321-200 | 88 | 85 |
| 320-72888-49 | PWS1058-OS-042321-200 | 93 | 98 |
| 320-72888-53 | PWS1060-OS-042321-200 | 89 | 101 |
| 320-72888-66 | PWS1126-OS-042321-200 | 92 | 99 |
| 320-72888-72 | PWS1107-OS-042321-200 | 95 | 99 |
| 320-72888-83 | PWS1059-OS-042421-200 | 92 | 87 |
| 320-72888-104 | PWS1133-OS-042421-200 | 97 | 105 |
| 320-72888-116 | PWS1053-OS-042521-200 | 94 | 90 |
| 320-72888-123 | PWS1046-OS-042521-200 | 94 | 93 |
| 320-72888-125 | PWS1081-OS-042521-200 | 85 | 87 |
| 320-73077-2 | PWS1132-OS-042621-200 | 93 | 64 |
| 320-73077-4 | PWS1105-OS-042621-200 | 74 | 58 |
| 320-73077-22 | PWS1052-OS-042721-200 | 84 | 64 |
| 320-73077-24 | PWS1042-OS-042721-200 | 84 | 64 |
| 320-73077-30 | PWS1066-OS-042721-200 | 89 | 68 |
| 320-73077-51 | PWS1121-OS-042721-200 | 85 | 64 |
| 320-73077-62 | PWS1141-OS-042821-200 | 87 | 66 |
| 320-73077-64 | PWS1050-OS-042821-200 | 89 | 63 |

# Isotope Dilution Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | NMFM (10-150) | NEFM (10-150) | | | | | | | | |
| 320-73077-72 | PWS1118-OS-042821-200 | 89 | 68 | | | | | | | | |
| 320-73077-75 | PWS1084-OS-042821-200 | 84 | 67 | | | | | | | | |
| 320-73172-48 | PWS1023-OS-043021-200 | 95 | 77 | | | | | | | | |
| 320-73172-67 | PWS1063-OS-050121-200 | 96 | 75 | | | | | | | | |
| 320-73508-8 | PWS1154-OS-050621-200 | 96 | 89 | | | | | | | | |
| 320-73508-14 | PWS1193-OS-050721-200 | 97 | 88 | | | | | | | | |
| LCS 320-496845/2-A | Lab Control Sample | 101 | 90 | | | | | | | | |
| LCS 320-497004/2-A | Lab Control Sample | 97 | 74 | | | | | | | | |
| LCS 320-497006/2-A | Lab Control Sample | 88 | 69 | | | | | | | | |
| LCS 320-497341/2-A | Lab Control Sample | 82 | 91 | | | | | | | | |
| LCSD 320-496845/3-A | Lab Control Sample Dup | 88 | 89 | | | | | | | | |
| LCSD 320-497004/3-A | Lab Control Sample Dup | 98 | 73 | | | | | | | | |
| LCSD 320-497006/3-A | Lab Control Sample Dup | 85 | 65 | | | | | | | | |
| LCSD 320-497341/3-A | Lab Control Sample Dup | 99 | 99 | | | | | | | | |
| MB 320-496845/1-A | Method Blank | 88 | 84 | | | | | | | | |
| MB 320-497004/1-A | Method Blank | 89 | 71 | | | | | | | | |
| MB 320-497006/1-A | Method Blank | 85 | 64 | | | | | | | | |
| MB 320-497341/1-A | Method Blank | 97 | 96 | | | | | | | | |

**Surrogate Legend**

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
M102FTS = 13C2 10:2 FTS
HFPODA = 13C3 HFPO-DA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-496845/1-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 06/08/21 19:13 | 06/13/21 16:21 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *95* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |
| *13C5 PFPeA* | *98* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |
| *13C4 PFHpA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |
| *13C4 PFOA* | *99* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *06/08/21 19:13* | *06/13/21 16:21* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-496845/1-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C2 PFDA | 92 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C2 PFUnA | 87 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C2 PFDoA | 84 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C2 PFTeDA | 83 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C2 PFHxDA | 102 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C3 PFBS | 89 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 18O2 PFHxS | 94 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C8 FOSA | 88 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| M2-4:2 FTS | 104 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| M2-6:2 FTS | 96 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| M2-8:2 FTS | 90 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C2 10:2 FTS | 92 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| 13C3 HFPO-DA | 102 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d3-NMeFOSAA | 83 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d5-NEtFOSAA | 85 | | 25 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d-N-MeFOSA-M | 73 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d-N-EtFOSA-M | 72 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d7-N-MeFOSE-M | 88 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |
| d9-N-EtFOSE-M | 84 | | 10 - 150 | 06/08/21 19:13 | 06/13/21 16:21 | 1 |

**Lab Sample ID: LCS 320-496845/2-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 42.3 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 36.7 | | ng/L | | 92 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 35.8 | | ng/L | | 89 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 39.1 | | ng/L | | 98 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 38.0 | | ng/L | | 95 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 35.7 | | ng/L | | 101 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.2 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 34.3 | | ng/L | | 94 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-496845/2-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.2 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.0 | | ng/L | | 102 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 37.9 | | ng/L | | 99 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 37.2 | | ng/L | | 96 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 34.8 | | ng/L | | 90 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 40.6 | | ng/L | | 101 | 60 - 135 |
| NMeFOSA | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| NEtFOSA | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 |
| NMeFOSAA | 40.0 | 41.0 | | ng/L | | 103 | 60 - 135 |
| NEtFOSAA | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| NMeFOSE | 40.0 | 38.7 | | ng/L | | 97 | 60 - 135 |
| NEtFOSE | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| 4:2 FTS | 37.4 | 37.5 | | ng/L | | 100 | 60 - 135 |
| 6:2 FTS | 37.9 | 37.7 | | ng/L | | 100 | 60 - 135 |
| 8:2 FTS | 38.3 | 38.6 | | ng/L | | 101 | 60 - 135 |
| 10:2 FTS | 38.6 | 35.6 | | ng/L | | 92 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| F-53B Major | 37.3 | 36.4 | | ng/L | | 98 | 60 - 135 |
| F-53B Minor | 37.7 | 37.8 | | ng/L | | 100 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 40.2 | | ng/L | | 107 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* |
| *13C5 PFPeA* | *100* | | *25 - 150* |
| *13C2 PFHxA* | *97* | | *25 - 150* |
| *13C4 PFHpA* | *103* | | *25 - 150* |
| *13C4 PFOA* | *104* | | *25 - 150* |
| *13C5 PFNA* | *103* | | *25 - 150* |
| *13C2 PFDA* | *95* | | *25 - 150* |
| *13C2 PFUnA* | *92* | | *25 - 150* |
| *13C2 PFDoA* | *99* | | *25 - 150* |
| *13C2 PFTeDA* | *87* | | *25 - 150* |
| *13C2 PFHxDA* | *117* | | *25 - 150* |
| *13C3 PFBS* | *99* | | *25 - 150* |
| *18O2 PFHxS* | *102* | | *25 - 150* |
| *13C4 PFOS* | *100* | | *25 - 150* |
| *13C8 FOSA* | *93* | | *10 - 150* |
| *M2-4:2 FTS* | *106* | | *25 - 150* |
| *M2-6:2 FTS* | *95* | | *25 - 150* |
| *M2-8:2 FTS* | *105* | | *25 - 150* |
| *13C2 10:2 FTS* | *97* | | *25 - 150* |
| *13C3 HFPO-DA* | *102* | | *25 - 150* |
| *d3-NMeFOSAA* | *88* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-496845/2-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *d5-NEtFOSAA* | *84* | | *25 - 150* |
| *d-N-MeFOSA-M* | *89* | | *10 - 150* |
| *d-N-EtFOSA-M* | *86* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *101* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *90* | | *10 - 150* |

**Lab Sample ID: LCSD 320-496845/3-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 38.1 | | ng/L | | 95 | 60 - 135 | 9 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 | 8 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 37.9 | | ng/L | | 95 | 60 - 135 | 6 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 | 4 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 36.5 | | ng/L | | 91 | 60 - 135 | 14 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 35.4 | | ng/L | | 88 | 60 - 135 | 4 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 40.6 | | ng/L | | 102 | 60 - 135 | 2 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 35.8 | | ng/L | | 89 | 60 - 135 | 11 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 37.6 | | ng/L | | 94 | 60 - 135 | 5 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 38.1 | | ng/L | | 95 | 60 - 135 | 3 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 | 11 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 43.7 | | ng/L | | 109 | 60 - 135 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 34.9 | | ng/L | | 99 | 60 - 135 | 2 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 38.6 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 33.4 | | ng/L | | 92 | 60 - 135 | 3 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 38.6 | | ng/L | | 101 | 60 - 135 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 37.8 | | ng/L | | 102 | 60 - 135 | 1 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 37.3 | | ng/L | | 97 | 60 - 135 | 2 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 35.7 | | ng/L | | 93 | 60 - 135 | 4 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 34.2 | | ng/L | | 88 | 60 - 135 | 2 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 39.0 | | ng/L | | 98 | 60 - 135 | 4 | 30 |
| NMeFOSA | | | 40.0 | 41.4 | | ng/L | | 104 | 60 - 135 | 1 | 30 |
| NEtFOSA | | | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 | 5 | 30 |
| NMeFOSAA | | | 40.0 | 38.2 | | ng/L | | 95 | 60 - 135 | 7 | 30 |
| NEtFOSAA | | | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 | 6 | 30 |
| NMeFOSE | | | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 | 11 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-496845/3-A**
**Matrix: Water**
**Analysis Batch: 497991**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 496845**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NEtFOSE | | | 40.0 | 37.9 | | ng/L | | 95 | 60 - 135 | 11 | 30 |
| 4:2 FTS | | | 37.4 | 35.3 | | ng/L | | 95 | 60 - 135 | 6 | 30 |
| 6:2 FTS | | | 37.9 | 37.3 | | ng/L | | 98 | 60 - 135 | 1 | 30 |
| 8:2 FTS | | | 38.3 | 38.7 | | ng/L | | 101 | 60 - 135 | 0 | 30 |
| 10:2 FTS | | | 38.6 | 34.1 | | ng/L | | 88 | 60 - 135 | 4 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 | 1 | 30 |
| F-53B Major | | | 37.3 | 37.3 | | ng/L | | 100 | 60 - 135 | 2 | 30 |
| F-53B Minor | | | 37.7 | 36.7 | | ng/L | | 98 | 60 - 135 | 3 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 39.8 | | ng/L | | 106 | 60 - 135 | 1 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *103* | | *25 - 150* |
| *13C5 PFPeA* | *101* | | *25 - 150* |
| *13C2 PFHxA* | *98* | | *25 - 150* |
| *13C4 PFHpA* | *103* | | *25 - 150* |
| *13C4 PFOA* | *99* | | *25 - 150* |
| *13C5 PFNA* | *104* | | *25 - 150* |
| *13C2 PFDA* | *97* | | *25 - 150* |
| *13C2 PFUnA* | *85* | | *25 - 150* |
| *13C2 PFDoA* | *89* | | *25 - 150* |
| *13C2 PFTeDA* | *82* | | *25 - 150* |
| *13C2 PFHxDA* | *100* | | *25 - 150* |
| *13C3 PFBS* | *93* | | *25 - 150* |
| *18O2 PFHxS* | *101* | | *25 - 150* |
| *13C4 PFOS* | *95* | | *25 - 150* |
| *13C8 FOSA* | *90* | | *10 - 150* |
| *M2-4:2 FTS* | *109* | | *25 - 150* |
| *M2-6:2 FTS* | *93* | | *25 - 150* |
| *M2-8:2 FTS* | *112* | | *25 - 150* |
| *13C2 10:2 FTS* | *105* | | *25 - 150* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* |
| *d3-NMeFOSAA* | *88* | | *25 - 150* |
| *d5-NEtFOSAA* | *87* | | *25 - 150* |
| *d-N-MeFOSA-M* | *80* | | *10 - 150* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *88* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *89* | | *10 - 150* |

**Lab Sample ID: MB 320-497004/1-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-497004/1-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 06/09/21 12:34 | 06/10/21 22:17 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C5 PFPeA* | *112* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFHxA* | *94* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C4 PFHpA* | *103* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C4 PFOA* | *93* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C5 PFNA* | *99* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFDA* | *90* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFUnA* | *59* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFTeDA* | *98* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |
| *13C2 PFHxDA* | *91* | | *25 - 150* | *06/09/21 12:34* | *06/10/21 22:17* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-497004/1-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 13C3 PFBS | 82 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 18O2 PFHxS | 88 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 13C4 PFOS | 92 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 13C8 FOSA | 103 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| M2-4:2 FTS | 78 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| M2-6:2 FTS | 74 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| M2-8:2 FTS | 67 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 13C2 10:2 FTS | 86 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| 13C3 HFPO-DA | 93 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d3-NMeFOSAA | 99 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d5-NEtFOSAA | 108 | | 25 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d-N-MeFOSA-M | 71 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d-N-EtFOSA-M | 74 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d7-N-MeFOSE-M | 89 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |
| d9-N-EtFOSE-M | 71 | | 10 - 150 | 06/09/21 12:34 | 06/10/21 22:17 | 1 |

**Lab Sample ID: LCS 320-497004/2-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 44.7 | | ng/L | | 112 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 67.7 | *+ | ng/L | | 169 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 43.4 | | ng/L | | 108 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 41.4 | | ng/L | | 103 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 41.6 | | ng/L | | 104 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 38.9 | | ng/L | | 110 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 39.1 | | ng/L | | 104 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 35.9 | | ng/L | | 99 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.4 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 36.3 | | ng/L | | 98 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 40.5 | | ng/L | | 106 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-497004/2-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 38.2 | | ng/L | | 99 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 34.8 | | ng/L | | 90 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 |
| NMeFOSA | 40.0 | 44.9 | | ng/L | | 112 | 60 - 135 |
| NEtFOSA | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 |
| NMeFOSAA | 40.0 | 37.0 | | ng/L | | 92 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.8 | | ng/L | | 104 | 60 - 135 |
| NMeFOSE | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 |
| NEtFOSE | 40.0 | 52.4 | | ng/L | | 131 | 60 - 135 |
| 4:2 FTS | 37.4 | 36.8 | | ng/L | | 98 | 60 - 135 |
| 6:2 FTS | 37.9 | 38.8 | | ng/L | | 102 | 60 - 135 |
| 8:2 FTS | 38.3 | 42.1 | | ng/L | | 110 | 60 - 135 |
| 10:2 FTS | 38.6 | 40.3 | | ng/L | | 104 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 46.5 | | ng/L | | 116 | 60 - 135 |
| F-53B Major | 37.3 | 38.0 | | ng/L | | 102 | 60 - 135 |
| F-53B Minor | 37.7 | 37.2 | | ng/L | | 99 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 42.6 | | ng/L | | 113 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *108* | | *25 - 150* |
| *13C5 PFPeA* | *123* | | *25 - 150* |
| *13C2 PFHxA* | *103* | | *25 - 150* |
| *13C4 PFHpA* | *111* | | *25 - 150* |
| *13C4 PFOA* | *96* | | *25 - 150* |
| *13C5 PFNA* | *108* | | *25 - 150* |
| *13C2 PFDA* | *94* | | *25 - 150* |
| *13C2 PFUnA* | *62* | | *25 - 150* |
| *13C2 PFDoA* | *95* | | *25 - 150* |
| *13C2 PFTeDA* | *100* | | *25 - 150* |
| *13C2 PFHxDA* | *100* | | *25 - 150* |
| *13C3 PFBS* | *96* | | *25 - 150* |
| *18O2 PFHxS* | *102* | | *25 - 150* |
| *13C4 PFOS* | *100* | | *25 - 150* |
| *13C8 FOSA* | *97* | | *10 - 150* |
| *M2-4:2 FTS* | *85* | | *25 - 150* |
| *M2-6:2 FTS* | *73* | | *25 - 150* |
| *M2-8:2 FTS* | *69* | | *25 - 150* |
| *13C2 10:2 FTS* | *82* | | *25 - 150* |
| *13C3 HFPO-DA* | *95* | | *25 - 150* |
| *d3-NMeFOSAA* | *107* | | *25 - 150* |
| *d5-NEtFOSAA* | *102* | | *25 - 150* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* |
| *d-N-EtFOSA-M* | *80* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *74* | | *10 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-497004/3-A**
**Matrix: Water**
**Analysis Batch: 497404**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497004**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 2 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 | 6 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 38.4 | | ng/L | | 96 | 60 - 135 | 3 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 44.0 | | ng/L | | 110 | 60 - 135 | 2 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 43.4 | | ng/L | | 109 | 60 - 135 | 1 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 44.4 | | ng/L | | 111 | 60 - 135 | 0 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 66.2 | *+ | ng/L | | 165 | 60 - 135 | 2 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 | 5 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 | 3 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 | 1 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 | 8 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 37.2 | | ng/L | | 105 | 60 - 135 | 4 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 39.0 | | ng/L | | 104 | 60 - 135 | 0 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 37.7 | | ng/L | | 103 | 60 - 135 | 5 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 42.0 | | ng/L | | 110 | 60 - 135 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 35.6 | | ng/L | | 96 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 40.9 | | ng/L | | 107 | 60 - 135 | 1 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 35.2 | | ng/L | | 91 | 60 - 135 | 8 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 33.9 | | ng/L | | 88 | 60 - 135 | 3 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 40.6 | | ng/L | | 101 | 60 - 135 | 1 | 30 |
| NMeFOSA | | | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 | 7 | 30 |
| NEtFOSA | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 9 | 30 |
| NMeFOSAA | | | 40.0 | 39.6 | | ng/L | | 99 | 60 - 135 | 7 | 30 |
| NEtFOSAA | | | 40.0 | 40.6 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| NMeFOSE | | | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 | 3 | 30 |
| NEtFOSE | | | 40.0 | 52.4 | | ng/L | | 131 | 60 - 135 | 0 | 30 |
| 4:2 FTS | | | 37.4 | 39.9 | | ng/L | | 107 | 60 - 135 | 8 | 30 |
| 6:2 FTS | | | 37.9 | 36.4 | | ng/L | | 96 | 60 - 135 | 6 | 30 |
| 8:2 FTS | | | 38.3 | 45.6 | | ng/L | | 119 | 60 - 135 | 8 | 30 |
| 10:2 FTS | | | 38.6 | 37.1 | | ng/L | | 96 | 60 - 135 | 8 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 42.8 | | ng/L | | 107 | 60 - 135 | 8 | 30 |
| F-53B Major | | | 37.3 | 39.8 | | ng/L | | 107 | 60 - 135 | 5 | 30 |
| F-53B Minor | | | 37.7 | 38.1 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 42.7 | | ng/L | | 113 | 60 - 135 | 0 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 107 | | 25 - 150 |
| 13C5 PFPeA | 118 | | 25 - 150 |
| 13C2 PFHxA | 101 | | 25 - 150 |
| 13C4 PFHpA | 110 | | 25 - 150 |
| 13C4 PFOA | 101 | | 25 - 150 |
| 13C5 PFNA | 105 | | 25 - 150 |
| 13C2 PFDA | 97 | | 25 - 150 |
| 13C2 PFUnA | 64 | | 25 - 150 |
| 13C2 PFDoA | 97 | | 25 - 150 |
| 13C2 PFTeDA | 102 | | 25 - 150 |
| 13C2 PFHxDA | 97 | | 25 - 150 |
| 13C3 PFBS | 94 | | 25 - 150 |
| 18O2 PFHxS | 96 | | 25 - 150 |
| 13C4 PFOS | 98 | | 25 - 150 |
| 13C8 FOSA | 99 | | 10 - 150 |
| M2-4:2 FTS | 74 | | 25 - 150 |
| M2-6:2 FTS | 79 | | 25 - 150 |
| M2-8:2 FTS | 73 | | 25 - 150 |
| 13C2 10:2 FTS | 83 | | 25 - 150 |
| 13C3 HFPO-DA | 102 | | 25 - 150 |
| d3-NMeFOSAA | 109 | | 25 - 150 |
| d5-NEtFOSAA | 108 | | 25 - 150 |
| d-N-MeFOSA-M | 83 | | 10 - 150 |
| d-N-EtFOSA-M | 78 | | 10 - 150 |
| d7-N-MeFOSE-M | 98 | | 10 - 150 |
| d9-N-EtFOSE-M | 73 | | 10 - 150 |

**Lab Sample ID: MB 320-497006/1-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-497006/1-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 06/09/21 12:42 | 06/11/21 10:48 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C5 PFPeA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFHxA* | *85* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C4 PFHpA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C4 PFOA* | *98* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C5 PFNA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFDA* | *92* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFUnA* | *61* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFDoA* | *99* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFTeDA* | *97* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 PFHxDA* | *89* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C3 PFBS* | *90* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *18O2 PFHxS* | *94* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C4 PFOS* | *102* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C8 FOSA* | *92* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *M2-4:2 FTS* | *109* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *M2-6:2 FTS* | *119* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *M2-8:2 FTS* | *101* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C2 10:2 FTS* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *13C3 HFPO-DA* | *88* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d3-NMeFOSAA* | *95* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d5-NEtFOSAA* | *103* | | *25 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d-N-MeFOSA-M* | *75* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d-N-EtFOSA-M* | *75* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d7-N-MeFOSE-M* | *85* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |
| *d9-N-EtFOSE-M* | *64* | | *10 - 150* | *06/09/21 12:42* | *06/11/21 10:48* | *1* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-497006/2-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 42.1 | | ng/L | | 105 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 39.5 | | ng/L | | 99 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 45.4 | | ng/L | | 113 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 42.4 | | ng/L | | 106 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 64.8 | *+ | ng/L | | 162 | 60 - 135 |
| Perfluorododecanoic acid (PFDoA) | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 41.4 | | ng/L | | 103 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.5 | | ng/L | | 106 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 37.9 | | ng/L | | 107 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 40.7 | | ng/L | | 109 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 36.0 | | ng/L | | 99 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 40.4 | | ng/L | | 106 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 38.5 | | ng/L | | 104 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 39.4 | | ng/L | | 103 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 39.9 | | ng/L | | 103 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 40.0 | | ng/L | | 103 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 37.2 | | ng/L | | 93 | 60 - 135 |
| NMeFOSA | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 |
| NEtFOSA | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| NMeFOSAA | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 |
| NEtFOSAA | 40.0 | 40.7 | | ng/L | | 102 | 60 - 135 |
| NMeFOSE | 40.0 | 44.1 | | ng/L | | 110 | 60 - 135 |
| NEtFOSE | 40.0 | 49.5 | | ng/L | | 124 | 60 - 135 |
| 4:2 FTS | 37.4 | 34.2 | | ng/L | | 92 | 60 - 135 |
| 6:2 FTS | 37.9 | 38.8 | | ng/L | | 102 | 60 - 135 |
| 8:2 FTS | 38.3 | 41.1 | | ng/L | | 107 | 60 - 135 |
| 10:2 FTS | 38.6 | 39.8 | | ng/L | | 103 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 41.7 | | ng/L | | 104 | 60 - 135 |
| F-53B Major | 37.3 | 38.5 | | ng/L | | 103 | 60 - 135 |
| F-53B Minor | 37.7 | 40.8 | | ng/L | | 108 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 41.7 | | ng/L | | 111 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 13C4 PFBA | 102 | | 25 - 150 |
| 13C5 PFPeA | 103 | | 25 - 150 |
| 13C2 PFHxA | 96 | | 25 - 150 |
| 13C4 PFHpA | 100 | | 25 - 150 |
| 13C4 PFOA | 99 | | 25 - 150 |
| 13C5 PFNA | 95 | | 25 - 150 |
| 13C2 PFDA | 97 | | 25 - 150 |
| 13C2 PFUnA | 64 | | 25 - 150 |
| 13C2 PFDoA | 98 | | 25 - 150 |
| 13C2 PFTeDA | 104 | | 25 - 150 |
| 13C2 PFHxDA | 100 | | 25 - 150 |
| 13C3 PFBS | 96 | | 25 - 150 |
| 18O2 PFHxS | 101 | | 25 - 150 |
| 13C4 PFOS | 101 | | 25 - 150 |
| 13C8 FOSA | 103 | | 10 - 150 |
| M2-4:2 FTS | 107 | | 25 - 150 |
| M2-6:2 FTS | 106 | | 25 - 150 |
| M2-8:2 FTS | 108 | | 25 - 150 |
| 13C2 10:2 FTS | 103 | | 25 - 150 |
| 13C3 HFPO-DA | 91 | | 25 - 150 |
| d3-NMeFOSAA | 99 | | 25 - 150 |
| d5-NEtFOSAA | 102 | | 25 - 150 |
| d-N-MeFOSA-M | 78 | | 10 - 150 |
| d-N-EtFOSA-M | 78 | | 10 - 150 |
| d7-N-MeFOSE-M | 88 | | 10 - 150 |
| d9-N-EtFOSE-M | 69 | | 10 - 150 |

**Lab Sample ID: LCSD 320-497006/3-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 41.4 | | ng/L | | 104 | 60 - 135 | 1 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 | 5 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 41.9 | | ng/L | | 105 | 60 - 135 | 1 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 | 2 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 44.3 | | ng/L | | 111 | 60 - 135 | 3 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 8 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 | 1 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 66.2 | *+ | ng/L | | 165 | 60 - 135 | 2 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 | 5 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 39.0 | | ng/L | | 97 | 60 - 135 | 6 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 42.2 | | ng/L | | 105 | 60 - 135 | 1 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 | 0 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 43.8 | | ng/L | | 109 | 60 - 135 | 4 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 37.1 | | ng/L | | 105 | 60 - 135 | 2 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-497006/3-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 39.2 | | ng/L | | 105 | 60 - 135 | 4 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 36.7 | | ng/L | | 101 | 60 - 135 | 2 | 30 |
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 38.7 | | ng/L | | 101 | 60 - 135 | 4 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 37.5 | | ng/L | | 101 | 60 - 135 | 3 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 38.2 | | ng/L | | 99 | 60 - 135 | 3 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 40.7 | | ng/L | | 106 | 60 - 135 | 2 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 40.1 | | ng/L | | 104 | 60 - 135 | 0 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 38.2 | | ng/L | | 96 | 60 - 135 | 3 | 30 |
| NMeFOSA | | | 40.0 | 39.8 | | ng/L | | 99 | 60 - 135 | 5 | 30 |
| NEtFOSA | | | 40.0 | 44.6 | | ng/L | | 111 | 60 - 135 | 3 | 30 |
| NMeFOSAA | | | 40.0 | 38.9 | | ng/L | | 97 | 60 - 135 | 7 | 30 |
| NEtFOSAA | | | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 | 1 | 30 |
| NMeFOSE | | | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 | 2 | 30 |
| NEtFOSE | | | 40.0 | 51.8 | | ng/L | | 130 | 60 - 135 | 5 | 30 |
| 4:2 FTS | | | 37.4 | 35.9 | | ng/L | | 96 | 60 - 135 | 5 | 30 |
| 6:2 FTS | | | 37.9 | 37.2 | | ng/L | | 98 | 60 - 135 | 4 | 30 |
| 8:2 FTS | | | 38.3 | 42.3 | | ng/L | | 110 | 60 - 135 | 3 | 30 |
| 10:2 FTS | | | 38.6 | 38.9 | | ng/L | | 101 | 60 - 135 | 2 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 41.0 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| F-53B Major | | | 37.3 | 36.3 | | ng/L | | 97 | 60 - 135 | 6 | 30 |
| F-53B Minor | | | 37.7 | 37.8 | | ng/L | | 100 | 60 - 135 | 8 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 39.1 | | ng/L | | 104 | 60 - 135 | 6 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* |
| *13C5 PFPeA* | *97* | | *25 - 150* |
| *13C2 PFHxA* | *93* | | *25 - 150* |
| *13C4 PFHpA* | *98* | | *25 - 150* |
| *13C4 PFOA* | *95* | | *25 - 150* |
| *13C5 PFNA* | *97* | | *25 - 150* |
| *13C2 PFDA* | *97* | | *25 - 150* |
| *13C2 PFUnA* | *61* | | *25 - 150* |
| *13C2 PFDoA* | *98* | | *25 - 150* |
| *13C2 PFTeDA* | *102* | | *25 - 150* |
| *13C2 PFHxDA* | *93* | | *25 - 150* |
| *13C3 PFBS* | *95* | | *25 - 150* |
| *18O2 PFHxS* | *100* | | *25 - 150* |
| *13C4 PFOS* | *102* | | *25 - 150* |
| *13C8 FOSA* | *94* | | *10 - 150* |
| *M2-4:2 FTS* | *106* | | *25 - 150* |
| *M2-6:2 FTS* | *116* | | *25 - 150* |
| *M2-8:2 FTS* | *106* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-497006/3-A**
**Matrix: Water**
**Analysis Batch: 497754**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497006**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 13C2 10:2 FTS | 98 | | 25 - 150 |
| 13C3 HFPO-DA | 90 | | 25 - 150 |
| d3-NMeFOSAA | 101 | | 25 - 150 |
| d5-NEtFOSAA | 98 | | 25 - 150 |
| d-N-MeFOSA-M | 79 | | 10 - 150 |
| d-N-EtFOSA-M | 77 | | 10 - 150 |
| d7-N-MeFOSE-M | 85 | | 10 - 150 |
| d9-N-EtFOSE-M | 65 | | 10 - 150 |

**Lab Sample ID: MB 320-497341/1-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | ND | | 5.0 | 2.4 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoropentanoic acid (PFPeA) | ND | | 2.0 | 0.49 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorohexanoic acid (PFHxA) | ND | | 2.0 | 0.58 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoroheptanoic acid (PFHpA) | ND | | 2.0 | 0.25 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorooctanoic acid (PFOA) | ND | | 2.0 | 0.85 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorononanoic acid (PFNA) | ND | | 2.0 | 0.27 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorodecanoic acid (PFDA) | ND | | 2.0 | 0.31 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoroundecanoic acid (PFUnA) | ND | | 2.0 | 1.1 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorododecanoic acid (PFDoA) | ND | | 2.0 | 0.55 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorotridecanoic acid (PFTriA) | ND | | 2.0 | 1.3 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorotetradecanoic acid (PFTeA) | ND | | 2.0 | 0.73 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | ND | | 2.0 | 0.89 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoro-n-octadecanoic acid (PFODA) | ND | | 2.0 | 0.94 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorobutanesulfonic acid (PFBS) | ND | | 2.0 | 0.20 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoropentanesulfonic acid (PFPeS) | ND | | 2.0 | 0.30 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorohexanesulfonic acid (PFHxS) | ND | | 2.0 | 0.57 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluoroheptanesulfonic Acid (PFHpS) | ND | | 2.0 | 0.19 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorooctanesulfonic acid (PFOS) | ND | | 2.0 | 0.54 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorononanesulfonic acid (PFNS) | ND | | 2.0 | 0.37 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorodecanesulfonic acid (PFDS) | ND | | 2.0 | 0.32 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorododecanesulfonic acid (PFDoS) | ND | | 2.0 | 0.97 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| Perfluorooctanesulfonamide (FOSA) | ND | | 2.0 | 0.98 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NMeFOSA | ND | | 2.0 | 0.43 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NEtFOSA | ND | | 2.0 | 0.87 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NMeFOSAA | ND | | 5.0 | 1.2 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NEtFOSAA | ND | | 5.0 | 1.3 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NMeFOSE | ND | | 4.0 | 1.4 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| NEtFOSE | ND | | 2.0 | 0.85 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| 4:2 FTS | ND | | 2.0 | 0.24 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| 6:2 FTS | ND | | 5.0 | 2.5 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| 8:2 FTS | ND | | 2.0 | 0.46 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-497341/1-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 10:2 FTS | ND | | 2.0 | 0.67 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| HFPO-DA (GenX) | ND | | 4.0 | 1.5 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| F-53B Major | ND | | 2.0 | 0.24 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| F-53B Minor | ND | | 2.0 | 0.32 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ND | | 2.0 | 0.40 | ng/L | | 06/10/21 11:58 | 06/12/21 13:48 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *13C4 PFBA* | *99* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C5 PFPeA* | *98* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFHxA* | *101* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C4 PFHpA* | *106* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C4 PFOA* | *103* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C5 PFNA* | *103* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFDA* | *99* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFUnA* | *104* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFDoA* | *96* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFTeDA* | *89* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 PFHxDA* | *98* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C3 PFBS* | *113* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *18O2 PFHxS* | *107* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C4 PFOS* | *89* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C8 FOSA* | *101* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *M2-4:2 FTS* | *106* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *M2-6:2 FTS* | *121* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *M2-8:2 FTS* | *112* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C2 10:2 FTS* | *116* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *13C3 HFPO-DA* | *101* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d3-NMeFOSAA* | *100* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d5-NEtFOSAA* | *107* | | *25 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d-N-MeFOSA-M* | *79* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d-N-EtFOSA-M* | *79* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d7-N-MeFOSE-M* | *97* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |
| *d9-N-EtFOSE-M* | *96* | | *10 - 150* | *06/10/21 11:58* | *06/12/21 13:48* | *1* |

**Lab Sample ID: LCS 320-497341/2-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 |
| Perfluoropentanoic acid (PFPeA) | 40.0 | 39.9 | | ng/L | | 100 | 60 - 135 |
| Perfluorohexanoic acid (PFHxA) | 40.0 | 38.5 | | ng/L | | 96 | 60 - 135 |
| Perfluoroheptanoic acid (PFHpA) | 40.0 | 43.1 | | ng/L | | 108 | 60 - 135 |
| Perfluorooctanoic acid (PFOA) | 40.0 | 40.4 | | ng/L | | 101 | 60 - 135 |
| Perfluorononanoic acid (PFNA) | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 |
| Perfluorodecanoic acid (PFDA) | 40.0 | 33.6 | | ng/L | | 84 | 60 - 135 |
| Perfluoroundecanoic acid (PFUnA) | 40.0 | 40.0 | | ng/L | | 100 | 60 - 135 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-497341/2-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perfluorododecanoic acid (PFDoA) | 40.0 | 36.3 | | ng/L | | 91 | 60 - 135 |
| Perfluorotridecanoic acid (PFTriA) | 40.0 | 40.2 | | ng/L | | 101 | 60 - 135 |
| Perfluorotetradecanoic acid (PFTeA) | 40.0 | 40.9 | | ng/L | | 102 | 60 - 135 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 |
| Perfluoro-n-octadecanoic acid (PFODA) | 40.0 | 35.5 | | ng/L | | 89 | 60 - 135 |
| Perfluorobutanesulfonic acid (PFBS) | 35.4 | 30.8 | | ng/L | | 87 | 60 - 135 |
| Perfluoropentanesulfonic acid (PFPeS) | 37.5 | 31.3 | | ng/L | | 84 | 60 - 135 |
| Perfluorohexanesulfonic acid (PFHxS) | 36.4 | 33.6 | | ng/L | | 92 | 60 - 135 |
| Perfluoroheptanesulfonic Acid (PFHpS) | 38.1 | 43.3 | | ng/L | | 114 | 60 - 135 |
| Perfluorooctanesulfonic acid (PFOS) | 37.1 | 41.3 | | ng/L | | 111 | 60 - 135 |
| Perfluorononanesulfonic acid (PFNS) | 38.4 | 41.9 | | ng/L | | 109 | 60 - 135 |
| Perfluorodecanesulfonic acid (PFDS) | 38.6 | 40.3 | | ng/L | | 104 | 60 - 135 |
| Perfluorododecanesulfonic acid (PFDoS) | 38.7 | 39.3 | | ng/L | | 101 | 60 - 135 |
| Perfluorooctanesulfonamide (FOSA) | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 |
| NMeFOSA | 40.0 | 43.9 | | ng/L | | 110 | 60 - 135 |
| NEtFOSA | 40.0 | 44.2 | | ng/L | | 111 | 60 - 135 |
| NMeFOSAA | 40.0 | 37.5 | | ng/L | | 94 | 60 - 135 |
| NEtFOSAA | 40.0 | 41.3 | | ng/L | | 103 | 60 - 135 |
| NMeFOSE | 40.0 | 42.2 | | ng/L | | 106 | 60 - 135 |
| NEtFOSE | 40.0 | 41.0 | | ng/L | | 103 | 60 - 135 |
| 4:2 FTS | 37.4 | 37.6 | | ng/L | | 101 | 60 - 135 |
| 6:2 FTS | 37.9 | 39.0 | | ng/L | | 103 | 60 - 135 |
| 8:2 FTS | 38.3 | 39.3 | | ng/L | | 102 | 60 - 135 |
| 10:2 FTS | 38.6 | 36.8 | | ng/L | | 95 | 60 - 135 |
| HFPO-DA (GenX) | 40.0 | 42.6 | | ng/L | | 106 | 60 - 135 |
| F-53B Major | 37.3 | 40.3 | | ng/L | | 108 | 60 - 135 |
| F-53B Minor | 37.7 | 41.8 | | ng/L | | 111 | 60 - 135 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 37.7 | 44.3 | | ng/L | | 117 | 60 - 135 |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *98* | | *25 - 150* |
| *13C5 PFPeA* | *98* | | *25 - 150* |
| *13C2 PFHxA* | *101* | | *25 - 150* |
| *13C4 PFHpA* | *103* | | *25 - 150* |
| *13C4 PFOA* | *104* | | *25 - 150* |
| *13C5 PFNA* | *102* | | *25 - 150* |
| *13C2 PFDA* | *100* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-497341/2-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *13C2 PFUnA* | *99* | | *25 - 150* |
| *13C2 PFDoA* | *99* | | *25 - 150* |
| *13C2 PFTeDA* | *86* | | *25 - 150* |
| *13C2 PFHxDA* | *106* | | *25 - 150* |
| *13C3 PFBS* | *119* | | *25 - 150* |
| *18O2 PFHxS* | *103* | | *25 - 150* |
| *13C4 PFOS* | *87* | | *25 - 150* |
| *13C8 FOSA* | *94* | | *10 - 150* |
| *M2-4:2 FTS* | *108* | | *25 - 150* |
| *M2-6:2 FTS* | *104* | | *25 - 150* |
| *M2-8:2 FTS* | *107* | | *25 - 150* |
| *13C2 10:2 FTS* | *111* | | *25 - 150* |
| *13C3 HFPO-DA* | *99* | | *25 - 150* |
| *d3-NMeFOSAA* | *98* | | *25 - 150* |
| *d5-NEtFOSAA* | *101* | | *25 - 150* |
| *d-N-MeFOSA-M* | *73* | | *10 - 150* |
| *d-N-EtFOSA-M* | *72* | | *10 - 150* |
| *d7-N-MeFOSE-M* | *82* | | *10 - 150* |
| *d9-N-EtFOSE-M* | *91* | | *10 - 150* |

**Lab Sample ID: LCSD 320-497341/3-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluorobutanoic acid (PFBA) | | | 40.0 | 42.0 | | ng/L | | 105 | 60 - 135 | 3 | 30 |
| Perfluoropentanoic acid (PFPeA) | | | 40.0 | 41.5 | | ng/L | | 104 | 60 - 135 | 4 | 30 |
| Perfluorohexanoic acid (PFHxA) | | | 40.0 | 38.8 | | ng/L | | 97 | 60 - 135 | 1 | 30 |
| Perfluoroheptanoic acid (PFHpA) | | | 40.0 | 43.2 | | ng/L | | 108 | 60 - 135 | 0 | 30 |
| Perfluorooctanoic acid (PFOA) | | | 40.0 | 41.8 | | ng/L | | 105 | 60 - 135 | 4 | 30 |
| Perfluorononanoic acid (PFNA) | | | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| Perfluorodecanoic acid (PFDA) | | | 40.0 | 39.7 | | ng/L | | 99 | 60 - 135 | 16 | 30 |
| Perfluoroundecanoic acid (PFUnA) | | | 40.0 | 38.2 | | ng/L | | 96 | 60 - 135 | 5 | 30 |
| Perfluorododecanoic acid (PFDoA) | | | 40.0 | 40.2 | | ng/L | | 101 | 60 - 135 | 10 | 30 |
| Perfluorotridecanoic acid (PFTriA) | | | 40.0 | 39.3 | | ng/L | | 98 | 60 - 135 | 2 | 30 |
| Perfluorotetradecanoic acid (PFTeA) | | | 40.0 | 40.2 | | ng/L | | 101 | 60 - 135 | 2 | 30 |
| Perfluoro-n-hexadecanoic acid (PFHxDA) | | | 40.0 | 41.1 | | ng/L | | 103 | 60 - 135 | 4 | 30 |
| Perfluoro-n-octadecanoic acid (PFODA) | | | 40.0 | 40.3 | | ng/L | | 101 | 60 - 135 | 13 | 30 |
| Perfluorobutanesulfonic acid (PFBS) | | | 35.4 | 31.8 | | ng/L | | 90 | 60 - 135 | 3 | 30 |
| Perfluoropentanesulfonic acid (PFPeS) | | | 37.5 | 33.0 | | ng/L | | 88 | 60 - 135 | 5 | 30 |
| Perfluorohexanesulfonic acid (PFHxS) | | | 36.4 | 34.6 | | ng/L | | 95 | 60 - 135 | 3 | 30 |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-497341/3-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perfluoroheptanesulfonic Acid (PFHpS) | | | 38.1 | 43.8 | | ng/L | | 115 | 60 - 135 | 1 | 30 |
| Perfluorooctanesulfonic acid (PFOS) | | | 37.1 | 42.0 | | ng/L | | 113 | 60 - 135 | 2 | 30 |
| Perfluorononanesulfonic acid (PFNS) | | | 38.4 | 42.5 | | ng/L | | 111 | 60 - 135 | 1 | 30 |
| Perfluorodecanesulfonic acid (PFDS) | | | 38.6 | 40.5 | | ng/L | | 105 | 60 - 135 | 0 | 30 |
| Perfluorododecanesulfonic acid (PFDoS) | | | 38.7 | 40.4 | | ng/L | | 104 | 60 - 135 | 3 | 30 |
| Perfluorooctanesulfonamide (FOSA) | | | 40.0 | 40.1 | | ng/L | | 100 | 60 - 135 | 1 | 30 |
| NMeFOSA | | | 40.0 | 43.9 | | ng/L | | 110 | 60 - 135 | 0 | 30 |
| NEtFOSA | | | 40.0 | 45.3 | | ng/L | | 113 | 60 - 135 | 2 | 30 |
| NMeFOSAA | | | 40.0 | 40.5 | | ng/L | | 101 | 60 - 135 | 8 | 30 |
| NEtFOSAA | | | 40.0 | 41.0 | | ng/L | | 102 | 60 - 135 | 1 | 30 |
| NMeFOSE | | | 40.0 | 41.2 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| NEtFOSE | | | 40.0 | 40.2 | | ng/L | | 100 | 60 - 135 | 2 | 30 |
| 4:2 FTS | | | 37.4 | 38.5 | | ng/L | | 103 | 60 - 135 | 2 | 30 |
| 6:2 FTS | | | 37.9 | 37.0 | | ng/L | | 98 | 60 - 135 | 5 | 30 |
| 8:2 FTS | | | 38.3 | 41.5 | | ng/L | | 108 | 60 - 135 | 6 | 30 |
| 10:2 FTS | | | 38.6 | 38.8 | | ng/L | | 101 | 60 - 135 | 5 | 30 |
| HFPO-DA (GenX) | | | 40.0 | 42.7 | | ng/L | | 107 | 60 - 135 | 0 | 30 |
| F-53B Major | | | 37.3 | 42.4 | | ng/L | | 114 | 60 - 135 | 5 | 30 |
| F-53B Minor | | | 37.7 | 42.0 | | ng/L | | 111 | 60 - 135 | 1 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | | 37.7 | 45.1 | | ng/L | | 120 | 60 - 135 | 2 | 30 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *13C4 PFBA* | *101* | | *25 - 150* |
| *13C5 PFPeA* | *99* | | *25 - 150* |
| *13C2 PFHxA* | *105* | | *25 - 150* |
| *13C4 PFHpA* | *102* | | *25 - 150* |
| *13C4 PFOA* | *102* | | *25 - 150* |
| *13C5 PFNA* | *105* | | *25 - 150* |
| *13C2 PFDA* | *99* | | *25 - 150* |
| *13C2 PFUnA* | *106* | | *25 - 150* |
| *13C2 PFDoA* | *103* | | *25 - 150* |
| *13C2 PFTeDA* | *97* | | *25 - 150* |
| *13C2 PFHxDA* | *110* | | *25 - 150* |
| *13C3 PFBS* | *119* | | *25 - 150* |
| *18O2 PFHxS* | *105* | | *25 - 150* |
| *13C4 PFOS* | *90* | | *25 - 150* |
| *13C8 FOSA* | *102* | | *10 - 150* |
| *M2-4:2 FTS* | *103* | | *25 - 150* |
| *M2-6:2 FTS* | *105* | | *25 - 150* |
| *M2-8:2 FTS* | *105* | | *25 - 150* |
| *13C2 10:2 FTS* | *114* | | *25 - 150* |
| *13C3 HFPO-DA* | *103* | | *25 - 150* |
| *d3-NMeFOSAA* | *101* | | *25 - 150* |

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-497341/3-A**
**Matrix: Water**
**Analysis Batch: 497864**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 497341**

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| d5-NEtFOSAA | 105 | | 25 - 150 |
| d-N-MeFOSA-M | 77 | | 10 - 150 |
| d-N-EtFOSA-M | 75 | | 10 - 150 |
| d7-N-MeFOSE-M | 99 | | 10 - 150 |
| d9-N-EtFOSE-M | 99 | | 10 - 150 |

## LCMS

### Prep Batch: 496845

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-2 | PWS1049-OS-042122-200 | Total/NA | Water | 3535 | |
| 320-72888-5 | PWS1051-OS-042221-200 | Total/NA | Water | 3535 | |
| 320-72888-7 | PWS1047-OS-042221-200 | Total/NA | Water | 3535 | |
| 320-72888-13 | PWS1048-OS-042221-200 | Total/NA | Water | 3535 | |
| 320-72888-37 | PWS1016-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-41 | PWS1041-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-43 | PWS1045-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-45 | PWS1057-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-49 | PWS1058-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-53 | PWS1060-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-66 | PWS1126-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-72 | PWS1107-OS-042321-200 | Total/NA | Water | 3535 | |
| 320-72888-83 | PWS1059-OS-042421-200 | Total/NA | Water | 3535 | |
| 320-72888-104 | PWS1133-OS-042421-200 | Total/NA | Water | 3535 | |
| 320-72888-116 | PWS1053-OS-042521-200 | Total/NA | Water | 3535 | |
| 320-72888-123 | PWS1046-OS-042521-200 | Total/NA | Water | 3535 | |
| 320-72888-125 | PWS1081-OS-042521-200 | Total/NA | Water | 3535 | |
| 320-73508-8 | PWS1154-OS-050621-200 | Total/NA | Water | 3535 | |
| 320-73508-14 | PWS1193-OS-050721-200 | Total/NA | Water | 3535 | |
| MB 320-496845/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-496845/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-496845/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Prep Batch: 497004

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-13 | PWS1004-OS-041921-200 | Total/NA | Water | 3535 | |
| 320-72788-17 | PWS1018-OS-041921-200 | Total/NA | Water | 3535 | |
| 320-72788-38 | PWS1024-OS-042021-200 | Total/NA | Water | 3535 | |
| 320-72788-40 | PWS1027-OS-042021-200 | Total/NA | Water | 3535 | |
| 320-72788-42 | PWS1021-OS-042021-200 | Total/NA | Water | 3535 | |
| 320-72788-61 | PWS1183-OS-042021-200 | Total/NA | Water | 3535 | |
| 320-72788-80 | PWS1184-OS-042121-200 | Total/NA | Water | 3535 | |
| 320-72788-84 | PWS1145-OS-042121-200 | Total/NA | Water | 3535 | |
| 320-73172-48 | PWS1023-OS-043021-200 | Total/NA | Water | 3535 | |
| 320-73172-67 | PWS1063-OS-050121-200 | Total/NA | Water | 3535 | |
| MB 320-497004/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-497004/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-497004/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Prep Batch: 497006

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-2 | PWS1132-OS-042621-200 | Total/NA | Water | 3535 | |
| 320-73077-4 | PWS1105-OS-042621-200 | Total/NA | Water | 3535 | |
| 320-73077-22 | PWS1052-OS-042721-200 | Total/NA | Water | 3535 | |
| 320-73077-24 | PWS1042-OS-042721-200 | Total/NA | Water | 3535 | |
| 320-73077-30 | PWS1066-OS-042721-200 | Total/NA | Water | 3535 | |
| 320-73077-51 | PWS1121-OS-042721-200 | Total/NA | Water | 3535 | |
| 320-73077-62 | PWS1141-OS-042821-200 | Total/NA | Water | 3535 | |
| 320-73077-64 | PWS1050-OS-042821-200 | Total/NA | Water | 3535 | |
| 320-73077-72 | PWS1118-OS-042821-200 | Total/NA | Water | 3535 | |
| 320-73077-75 | PWS1084-OS-042821-200 | Total/NA | Water | 3535 | |

## LCMS (Continued)

### Prep Batch: 497006 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 320-497006/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-497006/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-497006/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Prep Batch: 497341

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-9 | PWS1055-OS-042221-200 | Total/NA | Water | 3535 | |
| MB 320-497341/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 320-497341/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 320-497341/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

### Analysis Batch: 497404

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72788-13 | PWS1004-OS-041921-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-17 | PWS1018-OS-041921-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-38 | PWS1024-OS-042021-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-40 | PWS1027-OS-042021-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-42 | PWS1021-OS-042021-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-61 | PWS1183-OS-042021-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-80 | PWS1184-OS-042121-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-72788-84 | PWS1145-OS-042121-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-73172-48 | PWS1023-OS-043021-200 | Total/NA | Water | 537 (modified) | 497004 |
| 320-73172-67 | PWS1063-OS-050121-200 | Total/NA | Water | 537 (modified) | 497004 |
| MB 320-497004/1-A | Method Blank | Total/NA | Water | 537 (modified) | 497004 |
| LCS 320-497004/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 497004 |
| LCSD 320-497004/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 497004 |

### Analysis Batch: 497754

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-73077-2 | PWS1132-OS-042621-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-4 | PWS1105-OS-042621-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-22 | PWS1052-OS-042721-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-24 | PWS1042-OS-042721-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-30 | PWS1066-OS-042721-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-51 | PWS1121-OS-042721-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-62 | PWS1141-OS-042821-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-64 | PWS1050-OS-042821-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-72 | PWS1118-OS-042821-200 | Total/NA | Water | 537 (modified) | 497006 |
| 320-73077-75 | PWS1084-OS-042821-200 | Total/NA | Water | 537 (modified) | 497006 |
| MB 320-497006/1-A | Method Blank | Total/NA | Water | 537 (modified) | 497006 |
| LCS 320-497006/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 497006 |
| LCSD 320-497006/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 497006 |

### Analysis Batch: 497854

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-5 | PWS1051-OS-042221-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-13 | PWS1048-OS-042221-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-37 | PWS1016-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-41 | PWS1041-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-43 | PWS1045-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-45 | PWS1057-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |

## LCMS (Continued)

### Analysis Batch: 497854 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-49 | PWS1058-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-53 | PWS1060-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-66 | PWS1126-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-72 | PWS1107-OS-042321-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-83 | PWS1059-OS-042421-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-104 | PWS1133-OS-042421-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-116 | PWS1053-OS-042521-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-123 | PWS1046-OS-042521-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-125 | PWS1081-OS-042521-200 | Total/NA | Water | 537 (modified) | 496845 |

### Analysis Batch: 497864

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-9 | PWS1055-OS-042221-200 | Total/NA | Water | 537 (modified) | 497341 |
| MB 320-497341/1-A | Method Blank | Total/NA | Water | 537 (modified) | 497341 |
| LCS 320-497341/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 497341 |
| LCSD 320-497341/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 497341 |

### Analysis Batch: 497991

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 320-72888-2 | PWS1049-OS-042122-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-72888-7 | PWS1047-OS-042221-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-73508-8 | PWS1154-OS-050621-200 | Total/NA | Water | 537 (modified) | 496845 |
| 320-73508-14 | PWS1193-OS-050721-200 | Total/NA | Water | 537 (modified) | 496845 |
| MB 320-496845/1-A | Method Blank | Total/NA | Water | 537 (modified) | 496845 |
| LCS 320-496845/2-A | Lab Control Sample | Total/NA | Water | 537 (modified) | 496845 |
| LCSD 320-496845/3-A | Lab Control Sample Dup | Total/NA | Water | 537 (modified) | 496845 |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1004-OS-041921-200
**Lab Sample ID: 320-72788-13**
**Date Collected: 04/19/21 16:58**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298.9 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 23:13 | RS1 | TAL SAC |

## Client Sample ID: PWS1018-OS-041921-200
**Lab Sample ID: 320-72788-17**
**Date Collected: 04/19/21 18:44**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.1 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 23:23 | RS1 | TAL SAC |

## Client Sample ID: PWS1024-OS-042021-200
**Lab Sample ID: 320-72788-38**
**Date Collected: 04/20/21 12:24**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.8 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 23:32 | RS1 | TAL SAC |

## Client Sample ID: PWS1027-OS-042021-200
**Lab Sample ID: 320-72788-40**
**Date Collected: 04/20/21 13:13**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 280.2 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 23:42 | RS1 | TAL SAC |

## Client Sample ID: PWS1021-OS-042021-200
**Lab Sample ID: 320-72788-42**
**Date Collected: 04/20/21 14:03**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.1 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/11/21 00:19 | RS1 | TAL SAC |

## Client Sample ID: PWS1183-OS-042021-200
**Lab Sample ID: 320-72788-61**
**Date Collected: 04/20/21 14:00**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 285.2 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/11/21 00:29 | RS1 | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1184-OS-042121-200
**Lab Sample ID: 320-72788-80**
**Date Collected: 04/21/21 08:30**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 276.4 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/11/21 00:38 | RS1 | TAL SAC |

## Client Sample ID: PWS1145-OS-042121-200
**Lab Sample ID: 320-72788-84**
**Date Collected: 04/21/21 10:35**
**Matrix: Water**
**Date Received: 04/23/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 267.2 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/11/21 00:47 | RS1 | TAL SAC |

## Client Sample ID: PWS1049-OS-042122-200
**Lab Sample ID: 320-72888-2**
**Date Collected: 04/22/21 08:01**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301.7 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497991 | 06/13/21 17:07 | S1M | TAL SAC |

## Client Sample ID: PWS1051-OS-042221-200
**Lab Sample ID: 320-72888-5**
**Date Collected: 04/22/21 11:09**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.7 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 07:52 | S1M | TAL SAC |

## Client Sample ID: PWS1047-OS-042221-200
**Lab Sample ID: 320-72888-7**
**Date Collected: 04/22/21 11:58**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 287.1 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497991 | 06/13/21 17:16 | S1M | TAL SAC |

## Client Sample ID: PWS1055-OS-042221-200
**Lab Sample ID: 320-72888-9**
**Date Collected: 04/22/21 13:23**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.6 mL | 10.0 mL | 497341 | 06/10/21 11:58 | LA | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497864 | 06/12/21 14:15 | S1M | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1048-OS-042221-200
## Lab Sample ID: 320-72888-13
**Date Collected: 04/22/21 18:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 290.5 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 08:10 | S1M | TAL SAC |

## Client Sample ID: PWS1016-OS-042321-200
## Lab Sample ID: 320-72888-37
**Date Collected: 04/23/21 09:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 282.2 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 08:19 | S1M | TAL SAC |

## Client Sample ID: PWS1041-OS-042321-200
## Lab Sample ID: 320-72888-41
**Date Collected: 04/23/21 11:00**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 293.1 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 08:56 | S1M | TAL SAC |

## Client Sample ID: PWS1045-OS-042321-200
## Lab Sample ID: 320-72888-43
**Date Collected: 04/23/21 12:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 283.9 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:05 | S1M | TAL SAC |

## Client Sample ID: PWS1057-OS-042321-200
## Lab Sample ID: 320-72888-45
**Date Collected: 04/23/21 13:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 278.5 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:14 | S1M | TAL SAC |

## Client Sample ID: PWS1058-OS-042321-200
## Lab Sample ID: 320-72888-49
**Date Collected: 04/23/21 15:15**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 306 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:23 | S1M | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1060-OS-042321-200
**Lab Sample ID: 320-72888-53**
**Date Collected: 04/23/21 16:50**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298.1 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:32 | S1M | TAL SAC |

## Client Sample ID: PWS1126-OS-042321-200
**Lab Sample ID: 320-72888-66**
**Date Collected: 04/23/21 12:35**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 271.7 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:41 | S1M | TAL SAC |

## Client Sample ID: PWS1107-OS-042321-200
**Lab Sample ID: 320-72888-72**
**Date Collected: 04/23/21 15:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 274.2 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 09:50 | S1M | TAL SAC |

## Client Sample ID: PWS1059-OS-042421-200
**Lab Sample ID: 320-72888-83**
**Date Collected: 04/24/21 12:05**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 300.8 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 10:00 | S1M | TAL SAC |

## Client Sample ID: PWS1133-OS-042421-200
**Lab Sample ID: 320-72888-104**
**Date Collected: 04/24/21 11:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 266.5 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 10:09 | S1M | TAL SAC |

## Client Sample ID: PWS1053-OS-042521-200
**Lab Sample ID: 320-72888-116**
**Date Collected: 04/25/21 08:25**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 277.2 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 10:18 | S1M | TAL SAC |

## Client Sample ID: PWS1046-OS-042521-200
**Lab Sample ID: 320-72888-123**
**Date Collected: 04/25/21 11:10**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 286.5 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 10:54 | S1M | TAL SAC |

## Client Sample ID: PWS1081-OS-042521-200
**Lab Sample ID: 320-72888-125**
**Date Collected: 04/25/21 12:20**
**Matrix: Water**
**Date Received: 04/27/21 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 305.9 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497854 | 06/12/21 11:04 | S1M | TAL SAC |

## Client Sample ID: PWS1132-OS-042621-200
**Lab Sample ID: 320-73077-2**
**Date Collected: 04/26/21 09:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 276.3 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 11:16 | K1S | TAL SAC |

## Client Sample ID: PWS1105-OS-042621-200
**Lab Sample ID: 320-73077-4**
**Date Collected: 04/26/21 10:45**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 295.9 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 11:25 | K1S | TAL SAC |

## Client Sample ID: PWS1052-OS-042721-200
**Lab Sample ID: 320-73077-22**
**Date Collected: 04/27/21 15:06**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 297.9 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 11:35 | K1S | TAL SAC |

## Client Sample ID: PWS1042-OS-042721-200
**Lab Sample ID: 320-73077-24**
**Date Collected: 04/27/21 16:10**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 303 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 11:44 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1066-OS-042721-200
**Lab Sample ID: 320-73077-30**
**Date Collected: 04/27/21 18:50**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.1 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 11:54 | K1S | TAL SAC |

## Client Sample ID: PWS1121-OS-042721-200
**Lab Sample ID: 320-73077-51**
**Date Collected: 04/27/21 18:05**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 299.2 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 12:03 | K1S | TAL SAC |

## Client Sample ID: PWS1141-OS-042821-200
**Lab Sample ID: 320-73077-62**
**Date Collected: 04/28/21 13:54**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 288.8 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 12:12 | K1S | TAL SAC |

## Client Sample ID: PWS1050-OS-042821-200
**Lab Sample ID: 320-73077-64**
**Date Collected: 04/28/21 14:49**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 284.6 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 12:50 | K1S | TAL SAC |

## Client Sample ID: PWS1118-OS-042821-200
**Lab Sample ID: 320-73077-72**
**Date Collected: 04/28/21 09:35**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 294.6 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 12:59 | K1S | TAL SAC |

## Client Sample ID: PWS1084-OS-042821-200
**Lab Sample ID: 320-73077-75**
**Date Collected: 04/28/21 10:15**
**Matrix: Water**
**Date Received: 04/30/21 09:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 265.1 mL | 10.0 mL | 497006 | 06/09/21 12:42 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497754 | 06/11/21 13:09 | K1S | TAL SAC |

# Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Client Sample ID: PWS1023-OS-043021-200
## Lab Sample ID: 320-73172-48
**Date Collected: 04/30/21 16:54**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 298 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 22:55 | RS1 | TAL SAC |

## Client Sample ID: PWS1063-OS-050121-200
## Lab Sample ID: 320-73172-67
**Date Collected: 05/01/21 14:05**
**Matrix: Water**
**Date Received: 05/04/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 301 mL | 10.0 mL | 497004 | 06/09/21 12:34 | LN | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497404 | 06/10/21 23:04 | RS1 | TAL SAC |

## Client Sample ID: PWS1154-OS-050621-200
## Lab Sample ID: 320-73508-8
**Date Collected: 05/06/21 16:50**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 303.5 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497991 | 06/13/21 16:49 | S1M | TAL SAC |

## Client Sample ID: PWS1193-OS-050721-200
## Lab Sample ID: 320-73508-14
**Date Collected: 05/07/21 12:11**
**Matrix: Water**
**Date Received: 05/11/21 10:10**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535 | | | 289.8 mL | 10.00 mL | 496845 | 06/08/21 19:13 | PV | TAL SAC |
| Total/NA | Analysis | 537 (modified) | | 1 | | | 497991 | 06/13/21 16:58 | S1M | TAL SAC |

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 320-72788-2
Project/Site: WDNR - Campbell PW Sampling

## Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998204680 | 08-31-21 |

# Method Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 537 (modified) | Fluorinated Alkyl Substances | EPA | TAL SAC |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | TAL SAC |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: WDNR - Campbell PW Sampling

Job ID: 320-72788-2

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 320-72788-13 | PWS1004-OS-041921-200 | Water | 04/19/21 16:58 | 04/23/21 10:00 | |
| 320-72788-17 | PWS1018-OS-041921-200 | Water | 04/19/21 18:44 | 04/23/21 10:00 | |
| 320-72788-38 | PWS1024-OS-042021-200 | Water | 04/20/21 12:24 | 04/23/21 10:00 | |
| 320-72788-40 | PWS1027-OS-042021-200 | Water | 04/20/21 13:13 | 04/23/21 10:00 | |
| 320-72788-42 | PWS1021-OS-042021-200 | Water | 04/20/21 14:03 | 04/23/21 10:00 | |
| 320-72788-61 | PWS1183-OS-042021-200 | Water | 04/20/21 14:00 | 04/23/21 10:00 | |
| 320-72788-80 | PWS1184-OS-042121-200 | Water | 04/21/21 08:30 | 04/23/21 10:00 | |
| 320-72788-84 | PWS1145-OS-042121-200 | Water | 04/21/21 10:35 | 04/23/21 10:00 | |
| 320-72888-2 | PWS1049-OS-042122-200 | Water | 04/22/21 08:01 | 04/27/21 10:00 | |
| 320-72888-5 | PWS1051-OS-042221-200 | Water | 04/22/21 11:09 | 04/27/21 10:00 | |
| 320-72888-7 | PWS1047-OS-042221-200 | Water | 04/22/21 11:58 | 04/27/21 10:00 | |
| 320-72888-9 | PWS1055-OS-042221-200 | Water | 04/22/21 13:23 | 04/27/21 10:00 | |
| 320-72888-13 | PWS1048-OS-042221-200 | Water | 04/22/21 18:25 | 04/27/21 10:00 | |
| 320-72888-37 | PWS1016-OS-042321-200 | Water | 04/23/21 09:00 | 04/27/21 10:00 | |
| 320-72888-41 | PWS1041-OS-042321-200 | Water | 04/23/21 11:00 | 04/27/21 10:00 | |
| 320-72888-43 | PWS1045-OS-042321-200 | Water | 04/23/21 12:10 | 04/27/21 10:00 | |
| 320-72888-45 | PWS1057-OS-042321-200 | Water | 04/23/21 13:05 | 04/27/21 10:00 | |
| 320-72888-49 | PWS1058-OS-042321-200 | Water | 04/23/21 15:15 | 04/27/21 10:00 | |
| 320-72888-53 | PWS1060-OS-042321-200 | Water | 04/23/21 16:50 | 04/27/21 10:00 | |
| 320-72888-66 | PWS1126-OS-042321-200 | Water | 04/23/21 12:35 | 04/27/21 10:00 | |
| 320-72888-72 | PWS1107-OS-042321-200 | Water | 04/23/21 15:20 | 04/27/21 10:00 | |
| 320-72888-83 | PWS1059-OS-042421-200 | Water | 04/24/21 12:05 | 04/27/21 10:00 | |
| 320-72888-104 | PWS1133-OS-042421-200 | Water | 04/24/21 11:20 | 04/27/21 10:00 | |
| 320-72888-116 | PWS1053-OS-042521-200 | Water | 04/25/21 08:25 | 04/27/21 10:00 | |
| 320-72888-123 | PWS1046-OS-042521-200 | Water | 04/25/21 11:10 | 04/27/21 10:00 | |
| 320-72888-125 | PWS1081-OS-042521-200 | Water | 04/25/21 12:20 | 04/27/21 10:00 | |
| 320-73077-2 | PWS1132-OS-042621-200 | Water | 04/26/21 09:50 | 04/30/21 09:50 | |
| 320-73077-4 | PWS1105-OS-042621-200 | Water | 04/26/21 10:45 | 04/30/21 09:50 | |
| 320-73077-22 | PWS1052-OS-042721-200 | Water | 04/27/21 15:06 | 04/30/21 09:50 | |
| 320-73077-24 | PWS1042-OS-042721-200 | Water | 04/27/21 16:10 | 04/30/21 09:50 | |
| 320-73077-30 | PWS1066-OS-042721-200 | Water | 04/27/21 18:50 | 04/30/21 09:50 | |
| 320-73077-51 | PWS1121-OS-042721-200 | Water | 04/27/21 18:05 | 04/30/21 09:50 | |
| 320-73077-62 | PWS1141-OS-042821-200 | Water | 04/28/21 13:54 | 04/30/21 09:50 | |
| 320-73077-64 | PWS1050-OS-042821-200 | Water | 04/28/21 14:49 | 04/30/21 09:50 | |
| 320-73077-72 | PWS1118-OS-042821-200 | Water | 04/28/21 09:35 | 04/30/21 09:50 | |
| 320-73077-75 | PWS1084-OS-042821-200 | Water | 04/28/21 10:15 | 04/30/21 09:50 | |
| 320-73172-48 | PWS1023-OS-043021-200 | Water | 04/30/21 16:54 | 05/04/21 10:10 | |
| 320-73172-67 | PWS1063-OS-050121-200 | Water | 05/01/21 14:05 | 05/04/21 10:10 | |
| 320-73508-8 | PWS1154-OS-050621-200 | Water | 05/06/21 16:50 | 05/11/21 10:10 | |
| 320-73508-14 | PWS1193-OS-050721-200 | Water | 05/07/21 12:11 | 05/11/21 10:10 | |

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.001 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-72788 Chain of Custody

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1008-OS-041921-100 | 4/19/21 | 1116 | G | Water | N | N | X | 2 | |
| PWS1008-OS-041921-200 | 4/19/21 | 1042 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-041921 | 4/19/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1009-OS-041921-100 | 4/19/21 | 1330 | G | Water | N | N | X | 2 | |
| PWS1009-OS-041921-200 | 4/19/21 | 1307 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1011-OS-041921-100 | 4/19/21 | 1431 | G | Water | N | N | X | 2 | |
| PWS1011-OS-041921-200 | 4/19/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1014-OS-041921-100 | 4/19/21 | 1603 | G | Water | N | N | X | 2 | |
| PWS1014-OS-041921-200 | 4/19/21 | 1536 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1002-OS-041921-100 | 4/19/21 | 1643 | G | Water | N | N | X | 2 | |
| PWS1002-OS-041921-200 | 4/19/21 | 1619 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/22/21@1400 | Wood | | 4-23-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 827 1645830, 1645825, 831, 834
Cooler Temperature(s) °C and Other Remarks: 0.8, 2.9 -1.8 1.5 2.7

Ver: 01/16/2019

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6/23/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.002 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1004-OS-041921-100 | 4/19/21 | 1723 | G | Water | N | N | X | 2 | |
| PWS1004-OS-041921-200 | 4/19/21 | 1658 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-041921 | 4/19/21 | 1723 | G | Water | N | Y | X | 2 | Primary sample is PWS1004-OS-041921-100 |
| PWS-MSD01-041921 | 4/19/21 | 1723 | G | Water | N | Y | X | 2 | Primary sample is PWS1004-OS-041921-100 |
| PWS1015-OS-041921-100 | 4/19/21 | 1825 | G | Water | N | N | X | 2 | |
| PWS1015-OS-041921-200 | 4/19/21 | 1805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1018-OS-041921-100 | 4/19/21 | 1905 | G | Water | N | N | X | 2 | |
| PWS1018-OS-041921-200 | 4/19/21 | 1844 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1190-OS-041921-100 | 4/19/21 | 1050 | G | Water | N | N | X | 2 | |
| PWS1190-OS-041921-200 | 4/19/21 | 1055 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1188-IS-041921-100 | 4/19/21 | 1215 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Kaitlyn Casey | 4/22/21 @ 1800 | Wood | | 4-23-21 10:00 | ETAS AL |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No: 827 1645830, 1645825, 831 834
Cooler Temperature(s) °C and Other Remarks: 2.9 08 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler | Lab PM | Carrier Tracking No(s) | COC No |
|---|---|---|---|---|
| | KMC/SEW/CAS/SMW | Alltucker, David R | FedEx | 531125.003 |
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1188-IS-041921-200 | 4/19/21 | 1220 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1181-OS-041921-100 | 4/19/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1181-OS-041921-200 | 4/19/21 | 1445 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1172-OS-041921-100 | 4/19/21 | 1655 | G | Water | N | N | X | 2 | |
| PWS1172-OS-041921-200 | 4/19/21 | 1700 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1170-OS-041921-100 | 4/19/21 | 1810 | G | Water | N | N | X | 2 | |
| PWS1170-OS-41921-200 | 4/19/21 | 1815 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1169-OS-041921-100 | 4/19/21 | 1855 | G | Water | N | N | X | 2 | |
| PWS1169-OS-041921-200 | 4/19/21 | 1900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1003-IS-042021-100 | 4/20/21 | 956 | G | Water | N | N | X | 2 | |
| PWS1003-IS-042021-200 | 4/20/21 | 916 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21@1800 | Wood | | 4-23-21 10:00 | ETAS AL |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☒ Yes ☐ No
Custody Seal No.: 1675830 827 825 831 834
Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 c/.Y 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.004 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1017-OS-042021-100 | 4/20/21 | 1042 | G | Water | N | N | X | 2 | |
| PWS1017-OS-042021-200 | 4/20/21 | 1020 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1020-OS-042021-100 | 4/20/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1020-OS-042021-200 | 4/20/21 | 1100 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042021 | 4/20/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1024-OS-042021-100 | 4/20/21 | 1302 | G | Water | N | N | X | 2 | |
| PWS1024-OS-042021-200 | 4/20/21 | 1224 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1027-OS-042021-100 | 4/20/21 | 1332 | G | Water | N | N | X | 2 | |
| PWS1027-OS-042021-200 | 4/20/21 | 1313 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1021-OS-042021-100 | 4/20/21 | 1436 | G | Water | N | N | X | 2 | |
| PWS1021-OS-042021-200 | 4/20/21 | 1403 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Larina Cassey | 4/22/21 @1900 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | | | | | | |
| 3 | | | | | | |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 827 1645830 1645834 825, 831

Cooler Temperature(s) °C and Other Remarks: 0.9 0.8, 4.8, 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.005 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | N | N | | | |
| PWS1022-OS-042021-100 | 4/20/21 | 1515 | G | Water | N | N | X | 2 | |
| PWS1022-OS-042021-200 | 4/20/21 | 1434 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1025-OS-042021-100 | 4/20/21 | 1618 | G | Water | N | N | X | 2 | |
| PWS1025-OS-042021-200 | 4/20/21 | 1546 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1026-OS-042021-100 | 4/20/21 | 1654 | G | Water | N | N | X | 2 | |
| PWS1026-OS-042021-200 | 4/20/21 | 1632 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1028-OS-042021-100 | 4/20/21 | 1742 | G | Water | N | N | X | 2 | |
| PWS1028-OS-042021-200 | 4/20/21 | 1721 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1006-OS-042021-100 | 4/20/21 | 1824 | G | Water | N | N | X | 2 | |
| PWS1006-OS-042021-200 | 4/20/21 | 1759 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042021 | 4/20/21 | 1202 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/22/21 @ 1800 | Wood | | 4-23-21 / 12:00 | ETA SAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 827 1645830 1645825, 831, ~~827~~ 834

Cooler Temperature(s) °C and Other Remarks: 0.8, 0.9, 4.8 1.5, 2.7 °C

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.006 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR - Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1168-OS-042021-100 | 4/20/21 | 0910 | G | Water | N | N | X | 2 | |
| PWS1168-OS-042021-200 | 4/20/21 | 0915 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1179-OS-042021-100 | 4/20/21 | 1030 | G | Water | N | N | X | 2 | |
| PWS1179-OS-042021-200 | 4/20/21 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042021 | 4/20/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1179-OS-042021-100 |
| PWS-MSD02-042021 | 4/20/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1179-OS-042021-100 |
| PWS1163-OS-042021-100 | 4/20/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1163-OS-042021-200 | 4/20/21 | 1140 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1183-OS-042021-100 | 4/20/21 | 1355 | G | Water | N | N | X | 2 | |
| PWS1183-OS-042021-200 | 4/20/21 | 1400 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042121 | 4/21/21 | 1201 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Karina Casey | Date/Time: 4/22/21@1800 | Company: Wood | Received by: | Date/Time: 4-23-21 10:00 | Company: ETASAC |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ~~Δ Yes~~ Δ No | Custody Seal No.: ~~4/23/21~~ 827, 1645830, 825, 831, 834 | Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.007 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | Analysis Requested | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1031-OS-042121-100 | 4/21/21 | 1102 | G | Water | N | N | X | 2 | |
| PWS1031-OS-042121-200 | 4/21/21 | 1037 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1032-OS-042121-100 | 4/21/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1032-OS-042121-200 | 4/21/21 | 1141 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042121 | 4/21/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1032-OS-042121-100 |
| PWS-MSD01-042121 | 4/21/21 | 1202 | G | Water | N | Y | X | 2 | Primary sample is PWS1032-OS-042121-100 |
| PWS1038-OS-042121-100 | 4/21/21 | 1330 | G | Water | N | N | X | 2 | |
| PWS1038-OS-042121-200 | 4/21/21 | 1300 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1043-OS-042121-100 | 4/21/21 | 1410 | G | Water | N | N | X | 2 | |
| PWS1043-OS-042121-200 | 4/21/21 | 1346 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1035-OS-042121-100 | 4/21/21 | 1506 | G | Water | N | N | X | 2 | |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21@1800 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645830, 825, 831, 834, 827

Cooler Temperature(s) °C and Other Remarks: 0.8 0.9 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 37[illegible]059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.008 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 8 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1035-OS-042121-200 | 4/21/21 | 1445 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1040-OS-042121-100 | 4/21/21 | 1607 | G | Water | N | N | X | 2 | |
| PWS1040-OS-042121-200 | 4/21/21 | 1545 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1033-OS-042121-100 | 4/21/21 | 1710 | G | Water | N | N | X | 2 | |
| PWS1033-OS-042121-200 | 4/21/21 | 1627 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1007-OS-042121-100 | 4/21/21 | 1830 | G | Water | N | N | X | 2 | |
| PWS1007-OS-042121-200 | 4/21/21 | 1751 | G | Water | N | N | X | 2 | HOLD pending analysis of -100 sample |
| PWS1184-OS-042121-100 | 4/21/21 | 825 | G | Water | N | N | X | 2 | |
| PWS-1184-OS-042121-200 | 4/21/21 | 830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1153-OS-042121-100 | 4/21/21 | 910 | G | Water | N | N | X | 2 | |
| PWS1153-OS-042121-200 | 4/21/21 | 915 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4/22/21 @ 1900 | Wood | | 4-23-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1645830, 827, 825, 831, 834

Cooler Temperature(s) °C and Other Remarks: 0.9 0.8 @ 4.8 1.5 2.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.009 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecanydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | N | | |
| PWS1145-OS-042121-100 | 4/21/21 | 1030 | G | Water | N | N | X | 2 | |
| PWS1145-OS-042121-200 | 4/21/21 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042121 | 4/21/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1157-OS-042121-100 | 4/21/21 | 1400 | G | Water | N | N | X | 2 | |
| PWS1157-OS-042121-200 | 4/21/21 | 1405 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1124-OS-042121-100 | 4/21/21 | 1620 | G | Water | N | N | X | 2 | |
| PWS1124-OS-042121-200 | 4/21/21 | 1625 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: Lauren Casey | Date/Time: 4/22/21@1800 | Company: Wood | Received by: | Date/Time: 4-23-21 / 10:00 | Company: ETASAC |
|---|---|---|---|---|---|---|
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.010 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

320-72888 Chain of Custody

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1049-OS-042122-100 | 4/22/21 | 823 | G | Water | N | N | X | 2 | |
| PWS1049-OS-042122-200 | 4/22/21 | 801 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042221 | 4/22/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1051-OS-042221-100 | 4/22/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1051-OS-042221-200 | 4/22/21 | 1109 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1047-OS-042221-100 | 4/22/21 | 1238 | G | Water | N | N | X | 2 | |
| PWS1047-OS-042221-200 | 4/22/21 | 1158 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1055-OS-042221-100 | 4/22/21 | 1354 | G | Water | N | N | X | 2 | |
| PWS1055-OS-042221-200 | 4/22/21 | 1323 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1054-OS-042221-100 | 4/22/21 | 1443 | G | Water | N | N | X | 2 | |
| PWS1054-OS-042221-200 | 4/22/21 | 1408 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/26/21@2000 | Wood | | 4-27-21/0:00 | ASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 165844, 165843, 165841, 165842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 2.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.011 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested | Preservation Codes: |
|---|---|---|---|
| City: Madsion | TAT Requested (days): 10 | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: WI, 53703 | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | Other: |
| Email: Evan.Thomas@woodplc.com | WO #: | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | |
| Site: Campbell, WI | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1048-OS-042221-100 | 4/22/21 | 1847 | G | Water | N | N | X | 2 | |
| PWS1048-OS-042221-200 | 4/22/21 | 1825 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1152-OS-042221-100 | 4/22/21 | 825 | G | Water | N | N | X | 2 | |
| PWS1152-OS-042221-200 | 4/22/21 | 830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042221 | 4/22/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1151-OS-042221-100 | 4/22/21 | 920 | G | Water | N | N | X | 2 | |
| PWS1151-OS-042221-200 | 4/22/21 | 925 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042221 | 4/22/21 | 920 | G | Water | N | Y | X | 2 | Primary sample is PWS1151-OS-042221-100 |
| PWS-MSD02-042221 | 4/22/21 | 920 | G | Water | N | Y | X | 2 | Primary sample is PWS1151-OS-042221-100 |
| PWS1139-OS-042221-100 | 4/22/21 | 1035 | G | Water | N | N | X | 2 | |
| PWS1139-OS-042221-200 | 4/22/21 | 1040 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kavina Casey | 4/26/21@2000 | Wood | | 4-27-21 / 10:00 | ETA SAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 1645835, 1645836, 1645839, 1645840
NC 4-21-21 1645843, 1645844, 1645841, 1645842, 1598279, 1598278
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

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6/23/2021

TNC List 1202

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.012 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1146-OS-042221-100 | 4/22/21 | 1145 | G | Water | N | N | X | 2 | |
| PWS1146-OS-042221-200 | 4/22/21 | 1150 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1138-OS-042221-100 | 4/22/21 | 1235 | G | Water | N | N | X | 2 | |
| PWS1138-OS-042221-200 | 4/22/21 | 1240 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1120-OS-042221-100 | 4/22/21 | 1335 | G | Water | N | N | X | 2 | |
| PWS1120-OS-042221-200 | 4/22/21 | 1339 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1122-OS-042221-100 | 4/22/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1122-OS-042221-200 | 4/22/21 | 1445 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1119-OS-042221-100 | 4/22/21 | 1530 | G | Water | N | N | X | 2 | |
| PWS1119-OS-042221-200 | 4/22/21 | 1535 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1173-OS-042221-100 | 4/22/21 | 1630 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Katrina Casey | 4/26/20@2000 | Wood | | 4-27-21 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 1645835, 1645836, 1645839, 1645840 # 1645844, 1645843, 1645841, 1645842, 1598279, 1598278
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.013 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1173-OS-042221-200 | 4/22/21 | 1635 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1030-OS-042321-100 | 4/23/21 | 840 | G | Water | N | N | X | 2 | |
| PWS1030-OS-042321-200 | 4/23/21 | 805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042321 | 4/23/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1016-OS-042321-100 | 4/23/21 | 940 | G | Water | N | N | X | 2 | |
| PWS1016-OS-042321-200 | 4/23/21 | 900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042321 | 4/23/21 | 940 | G | Water | N | Y | X | 2 | Primary sample is PWS1016-OS-042321-100 |
| PWS-MSD01-042321 | 4/23/21 | 940 | G | Water | N | Y | X | 2 | Primary sample is PWS1016-OS-042321-100 |
| PWS1037-OS-042321-100 | 4/23/21 | 1025 | G | Water | N | N | X | 2 | |
| PWS1037-OS-042321-200 | 4/23/21 | 1000 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1041-OS-042321-100 | 4/23/21 | 1130 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Martina Casey | 4-26-21 @ 2000 | Wood | [signature] | 4-27-21/10:00 | ETASAI |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 645835, 645836, 645839, 645840, 645844, 645843, 645841, 645842, 598279, 598278
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.014 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1041-OS-042321-200 | 4/23/21 | 1100 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1045-OS-042321-100 | 4/23/21 | 1245 | G | Water | N | N | X | 2 | |
| PWS1045-OS-042321-200 | 4/23/21 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1057-OS-042321-100 | 4/23/21 | 1325 | G | Water | N | N | X | 2 | |
| PWS1057-OS-042321-200 | 4/23/21 | 1305 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1056-OS-042321-100 | 4/23/21 | 1445 | G | Water | N | N | X | 2 | |
| PWS1056-OS-042321-200 | 4/23/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1058-OS-042321-100 | 4/23/21 | 1540 | G | Water | N | N | X | 2 | |
| PWS1058-OS-042321-200 | 4/23/21 | 1515 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1061-OS-042321-100 | 4/23/21 | 1635 | G | Water | N | N | X | 2 | |
| PWS1061-OS-042321-200 | 4/23/21 | 1605 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: Karina Casey | 4/26/21 @2000 | Wood | | 4-27-21 / 10:00 | EMSAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645835 / 1645836, 1645839, 1645840, 1645843, 1645844, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.1, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.015 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1060-OS-042321-100 | 4/23/21 | 1710 | G | Water | N | N | X | 2 | |
| PWS1060-OS-042321-200 | 4/23/21 | 1650 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1039-IS-042321-100 | 4/23/21 | 1905 | G | Water | N | N | X | 2 | |
| PWS1039-IS-042321-200 | 4/23/21 | 1830 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1176-IS-042321-100 | 4/23/21 | 840 | G | Water | N | N | X | 2 | |
| PWS1176-IS-042321-200 | 4/23/21 | 845 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1142-OS-042321-100 | 4/23/21 | 940 | G | Water | N | N | X | 2 | |
| PWS1142-OS-042321-200 | 4/23/21 | 945 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042321 | 4/23/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS1137-OS-042321-100 | 4/23/21 | 1020 | G | Water | N | N | X | 2 | |
| PWS1137-OS-042321-200 | 4/23/21 | 1025 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4/26/21 @ 2000 | Wood | | 4-27-21 / 10:00 | ETAsAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|
| Yes | 1645835, 1645836, 1645839, 1645840 1645844, 1645843, 1645841, 1645842, 1598279, 1598278 | 1.4, 1.7, 0.6, 1.0, 0.4 |

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.016 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1131-OS-042321-100 | 4/23/21 | 1115 | G | Water | N | N | X | 2 | |
| PWS1131-OS-042321-200 | 4/23/21 | 1120 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1126-OS-042321-100 | 4/23/21 | 1230 | G | Water | N | N | X | 2 | |
| PWS1126-OS-042321-200 | 4/23/21 | 1235 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1123-OS-042321-100 | 4/23/21 | 1310 | G | Water | N | N | X | 2 | |
| PWS1123-OS-042321-200 | 4/23/21 | 1315 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1117-OS-042321-100 | 4/23/21 | 1425 | G | Water | N | N | X | 2 | |
| PWS1117-OS-042321-200 | 4/23/21 | 1430 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1107-OS-042321-100 | 4/23/21 | 1515 | G | Water | N | N | X | 2 | |
| PWS1107-OS-042321-200 | 4/23/21 | 1520 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1062-OS-042421-100 | 4/24/21 | 845 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: Kenina Casey | 4/26/21 @2000 | Wood | | 4-27-21 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.7

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.017 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 8 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1062-OS-042421-200 | 4/24/21 | 820 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042421 | 4/24/21 | 845 | G | Water | N | Y | X | 2 | Primary sample is PWS1062-OS-042421-100 |
| PWS-MSD01-042421 | 4/24/21 | 845 | G | Water | N | Y | X | 2 | Primary sample is PWS1062-OS-042421-100 |
| PWS1064-OS-042421-100 | 4/24/21 | 930 | G | Water | N | N | X | 2 | |
| PWS1064-OS-042421-200 | 4/24/21 | 900 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042421 | 4/24/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1067-OS-042421-100 | 4/24/21 | 1015 | G | Water | N | N | X | 2 | |
| PWS1067-OS-042421-200 | 4/24/21 | 950 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1069-OS-042421-100 | 4/24/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1069-OS-042421-200 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1059-OS-042421-100 | 4/24/21 | 1235 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Marina Casey | 4-26-21@2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645841, 1645842, ~~1645838~~, 1598279, 1598278 NC 4-27-21

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.018 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (Wewater, S=solid, O=wasteloil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1059-OS-042421-200 | 4/24/21 | 1205 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1068-OS-042421-100 | 4/24/21 | 1335 | G | Water | N | N | X | 2 | |
| PWS1068-OS-042421-200 | 4/24/21 | 1310 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1072-OS-042421-100 | 4/24/21 | 1415 | G | Water | N | N | X | 2 | |
| PWS1072-OS-042421-200 | 4/24/21 | 1350 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1074-IS-042421-100 | 4/24/21 | 1550 | G | Water | N | N | X | 2 | |
| PWS1074-IS-042421-200 | 4/24/21 | 1525 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1065-OS-042421-100 | 4/24/21 | 1630 | G | Water | N | N | X | 2 | |
| PWS1065-OS-042421-200 | 4/24/21 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1075-IS-042421-100 | 4/24/21 | 1750 | G | Water | N | N | X | 2 | |
| PWS1075-IS-042421-200 | 4/24/21 | 1718 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: Kendra Casey | 4/26/21@2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.019 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 10 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1079-OS-042421-100 | 4/24/21 | 1830 | G | Water | N | N | X | 2 | |
| PWS1079-OS-042421-200 | 4/24/21 | 1810 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1108-OS-042421-100 | 4/24/21 | 850 | G | Water | N | N | X | 2 | |
| PWS1108-OS-042421-200 | 4/24/21 | 855 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1109-OS-042421-100 | 4/24/21 | 925 | G | Water | N | N | X | 2 | |
| PWS1109-OS-042421-200 | 4/24/21 | 930 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042421 | 4/24/21 | 925 | G | Water | N | Y | X | 2 | Primary sample is PWS1109-OS-042421-100 |
| PWS-MSD02-042421 | 4/24/21 | 925 | G | Water | N | Y | X | 2 | Primary sample is PWS1109-OS-042421-100 |
| PWS1159-OS-042421-100 | 4/24/21 | 1005 | G | Water | N | N | X | 2 | |
| PWS1159-OS-042421-200 | 4/24/21 | 1010 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042421 | 4/24/21 | 1202 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kenina Casey | 4/26/2021 2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: ~~1643~~ 1645835, 1645836, 1645839, 1645842 NC 4-27-21 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 2.6, 1.0, 0.4

Ver: 01/16/2019

* Time List 1202.

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.020 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 11 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1133-OS-042421-100 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | |
| PWS1133-OS-042421-200 | 4/24/21 | 1120 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1116-OS-042421-100 | 4/24/21 | 1205 | G | Water | N | N | X | 2 | |
| PWS1116-OS-042421-200 | 4/24/21 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1175-OS-042421-100 | 4/24/21 | 1350 | G | Water | N | N | X | 2 | |
| PWS1175-OS-042421-200 | 4/24/21 | 1355 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1143-OS-042421-100 | 4/24/21 | 1425 | G | Water | N | N | X | 2 | |
| PWS1143-OS-042421-200 | 4/24/21 | 1430 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1162-OS-042421-100 | 4/24/21 | 1530 | G | Water | N | N | X | 2 | |
| PWS1162-OS-042421-200 | 4/24/21 | 1535 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1156-OS-042421-100 | 4/24/21 | 1655 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-26-21@2000 | Wood | | 4-27-21/10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645847, 1645845, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.021 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 12 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1156-OS-042421-200 | 4/24/21 | 1700 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1053-OS-042521-100 | 4/25/21 | 900 | G | Water | N | N | X | 2 | |
| PWS1053-OS-042521-200 | 4/25/21 | 825 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042521 | 4/25/21 | 900 | G | Water | N | Y | X | 2 | Primary is PWS1053-OS-042521-100 |
| PWS-MSD01-042521 | 4/25/21 | 900 | G | Water | N | Y | X | 2 | Primary is PWS1053-OS-042521-100 |
| PWS1077-OS-042521-100 | 4/25/21 | 935 | G | Water | N | N | X | 2 | |
| PWS1077-OS-042521-200 | 4/25/21 | 910 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042521 | 4/25/21 | 1201 | G | Water | N | N | X | 2 | |
| PWS1083-OS-042521-100 | 4/25/21 | 1025 | G | Water | N | N | X | 2 | |
| PWS1083-OS-042521-200 | 4/25/21 | 955 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1046-OS-042521-100 | 4/25/21 | 1135 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Evan Thomas Casey | 4-26-21@2000 | Wood | | 4/27/21 \| 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 164583S, 1645843, 1645839, 1645840
164584S, 1645843, 1645841, 1645842, 1598279, 1598278
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.022 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 13 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1046-OS-042521-200 | 4/25/21 | 1110 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1081-OS-042521-100 | 4/25/21 | 1240 | G | Water | N | N | X | 2 | |
| PWS1081-OS-042521-200 | 4/25/21 | 1220 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1029-OS-042521-100 | 4/25/21 | 1440 | G | Water | N | N | X | 2 | |
| PWS1029-OS-042521-200 | 4/25/21 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1078-OS-042521-100 | 4/25/21 | 1505 | G | Water | N | N | X | 2 | |
| PWS1078-OS-042521-200 | 4/25/21 | 1525 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1144-OS-042521-100 | 4/25/21 | 950 | G | Water | N | N | X | 2 | |
| PWS1144-OS-042521-200 | 4/25/21 | 955 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1165-OS-042521-100 | 4/25/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS1165-OS-042521-200 | 4/25/21 | 1140 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-26-21@2000 | Wood | | 4-27-21 / 10:00 | ETASAC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No (~~Custody~~)
Custody Seal No.: NC 4-27-21 1645835, 1645836, 1645839, 1645840, 1645844 ~~1645835~~, 1645843, 1645841, 1645842, 1598278 ~~1598278~~
Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4
→ Time lot at 1444. DW Ellen lot

Ver: 01/16/2019

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6/23/2021

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.023 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 14 of 14 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS-FD02-042521 | 4/25/21 | 1202 | G | Water | N | N | X | 2 | |
| PWS-1069-OS-042421-100 | 4/24/21 | 1135 | G | Water | N | N | X | 2 | |
| PWS-1069-OS-042421-200 | 4/24/21 | 1115 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-1078-OS-042521-100 | 4/25/21 | 1525 | G | Water | N | N | X | 2 | |
| PWS-1078-OS-042521-200 | 4/25/21 | 1505 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-26-21@2000 | Wood | | 04-27-21 / 10:00 | ETAS AC |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, 1598278

Cooler Temperature(s) °C and Other Remarks: 1.4, 1.7, 0.6, 1.0, 0.4

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Ailtucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.024 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Ailtucker@Eurofinset.com | | Page: 1 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

Preservation Codes:

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

320-73077 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1132-OS-042621-100 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | |
| PWS1132-OS-042621-200 | 4/26/2021 | 950 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042621 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | Parent sample is: PWS1132-OS-042621-100 |
| PWS-MSD02-042621 | 4/26/2021 | 945 | G | Water | N | N | X | 2 | Parent sample is: PWS1132-OS-042621-100 |
| PWS1105-OS-042621-100 | 4/26/2021 | 1040 | G | Water | N | N | X | 2 | |
| PWS1105-OS-042621-200 | 4/26/2021 | 1045 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042621 | 4/26/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1182-OS-042621-100 | 4/26/2021 | 1205 | G | Water | N | N | X | 2 | |
| PWS1182-OS-042621-200 | 4/26/2021 | 1210 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1200-OS-042621-100 | 4/26/2021 | 1300 | G | Water | N | N | X | 2 | |
| PWS1200-OS-042621-200 | 4/26/2021 | 1305 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| | | | |
|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |

| | | | | | | |
|---|---|---|---|---|---|---|
| Relinquished by: Ramina Casey | Date/Time: 4-29-21@1500 | Company: Wood | Received by: Mark Adamiak | Date/Time: 4/30/21 950 | Company: ESTA See |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1502716, 1502717, 1502712, 1502713, 1502714, 1502715, 1502718, 1502719, 1502720, 1502721, 1502722, 1502723, 1502724, 1502725

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0 c, 1.4, 1.0, 2.0

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.025 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 9 |
| Company: Wood E&I Solutions inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1104-OS-042621-100 | 4/26/2021 | 1430 | G | Water | N | N | X | 2 | |
| PWS1104-OS-042621-200 | 4/26/2021 | 1435 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| ~~PWS1106-OS-042621-100~~ | ~~4/26/2021~~ | ~~1515~~ | ~~G~~ | ~~Water~~ | ~~N~~ | ~~N~~ | ~~X~~ | ~~2~~ | |
| ~~PWS1106-OS-042621-200~~ | ~~4/26/2021~~ | ~~1520~~ | ~~G~~ | ~~Water~~ | ~~N~~ | ~~N~~ | ~~X~~ | ~~2~~ | ~~HOLD, pending analysis of -100 sample~~ |
| PWS1167-OS-042621-100 | 4/26/2021 | 1555 | G | Water | N | N | X | 2 | |
| PWS1167-OS-042621-200 | 4/26/2021 | 1600 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1097-OS-042621-100 | 4/26/2021 | 1745 | G | Water | N | N | X | 2 | |
| PWS1097-OS-042621-200 | 4/26/2021 | 1750 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1005-OS-042721-100 | 4/27/2021 | 833 | G | Water | N | Y | X | 2 | |
| PWS1005-OS-042721-200 | 4/27/2021 | 813 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042721 | 4/27/2021 | 1201 | G | Water | N | N | X | 2 | |

KMC 4-29-21
KMC 4-29-21

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 Cancel

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kennina Casey | 4-29-21@1500 | Wood | Mark Hennessy | 4/30/21 9:50 | ESTA Sac |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1502716, 1502717 1502772

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0 c, 1.4, 1.0, 2.0

1502713, 1502714, 1502715, 1502718, 1502719, 1502770, 1502771, 1502722, 1502723, 1502724, 1502725

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.026 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1080-IS-042721-100 | 4/27/2021 | 931 | G | Water | N | N | X | 2 | |
| PWS1080-IS-042721-200 | 4/27/2021 | 912 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1052-OS-042721-100 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | |
| PWS1052-OS-042721-200 | 4/27/2021 | 1506 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042721 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | Parent sample is: PWS1052-OS-042721-100 |
| PWS-MSD01-042721 | 4/27/2021 | 1521 | G | Water | N | N | X | 2 | Parent sample is: PWS1052-OS-042721-100 |
| PWS1042-OS-042721-100 | 4/27/2021 | 1628 | G | Water | N | N | X | 2 | |
| PWS1042-OS-042721-200 | 4/27/2021 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1071-IS-042721-100 | 4/27/2021 | 1713 | G | Water | N | N | X | 2 | |
| PWS1071-IS-042721-200 | 4/27/2021 | 1656 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1010-IS-042721-100 | 4/27/2021 | 1826 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4-29-21@1500 | Wood | Mark Henrichsen | 4/30/21 9:50 | ETASac |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0 c, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723

1502725 1502724 1502726

Ver: 01/16/2019



6/23/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.027 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@EurofinsET.com | | Page: 4 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madison | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | | | | |
| PWS1010-IS-042721-200 | 4/27/2021 | 1806 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1066-OS-042721-100 | 4/27/2021 | 1907 | G | Water | N | N | X | 2 | |
| PWS1066-OS-042721-200 | 4/27/2021 | 1850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1091-OS-042721-100 | 4/27/2021 | 930 | G | Water | N | N | X | 2 | |
| PWS1091-OS-042721-200 | 4/27/2021 | 935 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042721 | 4/27/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1187-OS-042721-100 | 4/27/2021 | 1020 | G | Water | N | Y | X | 2 | |
| PWS1187-OS-042721-200 | 4/27/2021 | 1025 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1086-OS-042721-100 | 4/27/2021 | 1105 | G | Water | N | N | X | 2 | |
| PWS1086-OS-042721-200 | 4/27/2021 | 1110 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1099-OS-042721-100 | 4/27/2021 | 1145 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4-29-21@1500 | Wood | | 4/30/21 9:50 | ETA SAC |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717, 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.4, 1.0 c, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724 1502725

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.026 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6793 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | | | | |
| PWS1099-OS-042721-200 | 4/27/2021 | 1150 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1096-OS-042721-100 | 4/27/2021 | 1230 | G | Water | N | N | X | 2 | |
| PWS1096-OS-042721-200 | 4/27/2021 | 1235 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1090-OS-042721-100 | 4/27/2021 | 1350 | G | Water | N | N | X | 2 | |
| PWS1090-OS-042721-200 | 4/27/2021 | 1355 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1098-OS-042721-100 | 4/27/2021 | 1445 | G | Water | N | N | X | 2 | |
| PWS1098-OS-042721-200 | 4/27/2021 | 1450 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1093-OS-042721-100 | 4/27/2021 | 1550 | G | Water | N | N | X | 2 | |
| PWS1093-OS-042721-200 | 4/27/2021 | 1555 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1094-OS-042721-100 | 4/27/2021 | 1700 | G | Water | N | N | X | 2 | |
| PWS1094-OS-042721-200 | 4/27/2021 | 1705 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| | Kenina Casey | 4-29-21@1500 | Wood | | | |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723

1502724 1502725

Ver: 01/16/2019



6/23/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.029 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 7 |
| Company: Wood E&I Solutions inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1121-OS-042721-100 | 4/27/2021 | 1800 | G | Water | N | N | X | 2 | |
| PWS1121-OS-042721-200 | 4/27/2021 | 1805 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1129-OS-042821-100 | 4/28/2021 | 832 | G | Water | N | N | X | 2 | |
| PWS1129-OS-042821-200 | 4/28/2021 | 809 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042821 | 4/28/2021 | 1201 | G | Water | N | N | X | 2 | |
| PWS1115-OS-042821-100 | 4/28/2021 | 928 | G | Water | N | N | X | 2 | |
| PWS1115-OS-042821-200 | 4/28/2021 | 910 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1001-OS-042821-100 | 4/28/2021 | 1011 | G | Water | N | N | X | 2 | |
| PWS1001-OS-042821-200 | 4/28/2021 | 954 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1082-OS-042821-100 | 4/28/2021 | 1227 | G | Water | N | N | X | 2 | |
| PWS1082-OS-042821-200 | 4/28/2021 | 1201 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 4-29-21 @ 1500 | Wood | Mark Alexander | 4/30/21 9:50 | ESTA Sac |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1502716 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.4, 1.0, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724 1502725

Ver: 01/16/2019



6/23/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Allitucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.030 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Allitucker@Eurofinset.com | | Page: 7 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: |
|---|---|
| City: Madsion | TAT Requested (days): 10 |
| State, Zip: WI, 53703 | |
| Phone: (608) 819-6495 | PO #: C012704155 |
| Email: Evan.Thomas@woodplc.com | WO #: |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 |
| Site: Campbell, WI | SSOW#: |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1141-OS-042821-100 | 4/28/2021 | 1423 | G | Water | N | N | X | 2 | |
| PWS1141-OS-042821-200 | 4/28/2021 | 1354 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1050-OS-042821-100 | 4/28/2021 | 1510 | G | Water | N | N | X | 2 | |
| PWS1050-OS-042821-200 | 4/28/2021 | 1449 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1095-IS-042821-100 | 4/28/2021 | 1603 | G | Water | N | N | X | 2 | |
| PWS1095-IS-042821-200 | 4/28/2021 | 1533 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1111-OS-042821-100 | 4/28/2021 | 1704 | G | Water | N | N | X | 2 | |
| PWS1111-OS-042821-200 | 4/28/2021 | 1647 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1085-OS-042821-100 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | |
| PWS1085-OS-042821-200 | 4/28/2021 | 850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-042821 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1085-OS-042821-100 |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 4-29-21 @ 1500 | Wood | Mark Hernandez | 4/30/21 0950 | ETA Sac |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 C, 1.4, 2.0

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724 1502725

Ver: 01/16/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Allucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.031 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 226-6200 | E Mail: David.Allucker@Eurofinset.com | | Page: 8 of 9 |
| Company: Wood E&I Solutions inc | | | | Job #: |

| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: Madsion | TAT Requested (days): 10 | |
| State, Zip: WI, 53703 | | |
| Phone: (608) 819-6495 | PO #: C012704155 | |
| Email: Evan.Thomas@woodplc.com | WO #: | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | |
| Site: Campbell, WI | SSOW#: | |

**Preservation Codes:**

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | X | X | N | X | |
| PWS-MSD02-042821 | 4/28/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1085-OS-042821-100 |
| PWS1118-OS-042821-100 | 4/28/2021 | 930 | G | Water | N | Y | X | 2 | |
| PWS1118-OS-042821-200 | 4/28/2021 | 935 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042821 | 4/28/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1084-OS-042821-100 | 4/28/2021 | 1010 | G | Water | N | N | X | 2 | |
| PWS1084-OS-042821-200 | 4/28/2021 | 1015 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1164-IS-042821-100 | 4/28/2021 | 1120 | G | Water | N | N | X | 2 | |
| PWS1164-IS-042821-200 | 4/28/2021 | 1125 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1199-IS-042821-100 | 4/28/2021 | 1210 | G | Water | N | N | X | 2 | |
| PWS1199-IS-042821-200 | 4/28/2021 | 1215 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1150-OS-042821-100 | 4/28/2021 | 1255 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Kaitlyn Casey | 4-29-21@ 1500 | Wood | Mark Hennelly | 4/30/21 0950 | ETA Sac |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 C, 1.4, 2.0

Ver: 01/16/2019

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724

1502691



6/23/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.032 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 9 of 9 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

Analysis Requested

Preservation Codes:

| | |
|---|---|
| A - HCl | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1150-OS-042821-200 | 4/28/2021 | 1300 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1158-OS-042821-100 | 4/28/2021 | 1450 | G | Water | N | Y | X | 2 | |
| PWS1158-OS-042821-200 | 4/28/2021 | 1455 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1177-OS-042821-100 | 4/28/2021 | 1535 | G | Water | N | N | X | 2 | |
| PWS1177-OS-042821-200 | 4/28/2021 | 1540 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1178-OS-042821-100 | 4/28/2021 | 1615 | G | Water | N | N | X | 2 | |
| PWS1178-OS-042821-200 | 4/28/2021 | 1620 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1102-OS-042821-100 | 4/28/2021 | 1705 | G | Water | N | N | X | 2 | |
| PWS1102-OS-042821-200 | 4/28/2021 | 1710 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1186-IS-042821-100 | 4/28/2021 | 1745 | G | Water | N | N | X | 2 | |
| PWS1186-IS-042821-200 | 4/28/2021 | 1750 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| | | | |
|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
| Relinquished by: Karina Casely | Date/Time: 4-29-21@1500 | Company: Wood | Received by: Mark Hennelly |
| Relinquished by: | Date/Time: | Company | Received by: |
| Relinquished by: | Date/Time: | Company | Received by: |

| Date/Time | Company |
|---|---|
| 4/30/21 0950 | ETA Sac |
| | |
| | |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1502716, 1502717 1502712

Cooler Temperature(s) °C and Other Remarks: 0.6, 1.1, 1.3, 1.1, 1.0, 1.0 c, 1.4, 2.0

1502725

1502713 1502714 1502715 1502718 1502719 1502720 1502721 1502722 1502723 1502724

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.033 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73172 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1180-OS-042921-100 | 4/29/2021 | 927 | G | Water | N | N | X | 2 | |
| PWS1180-OS-042921-200 | 4/29/2021 | 909 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD01-042921 | 4/29/2021 | 1201 | G | Water | N | N | X | 2 | |
| PWS1013-OS-042921-100 | 4/29/2021 | 1030 | G | Water | N | Y | X | 2 | |
| PWS1013-OS-042921-200 | 4/29/2021 | 1006 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS01-042921 | 4/29/2021 | 1030 | G | Water | N | N | X | 2 | Parent sample is: PWS1013-OS-042921-100 |
| PWS-MSD01-042921 | 4/29/2021 | 1030 | G | Water | N | N | X | 2 | Parent sample is: PWS1013-OS-042921-100 |
| PWS1012-OS-042921-100 | 4/29/2021 | 1545 | G | Water | N | N | X | 2 | |
| PWS1012-OS-042821-200 | 4/29/2021 | 1519 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1076-OS-042921-100 | 4/29/2021 | 1627 | G | Water | N | N | X | 2 | |
| PWS1076-OS-042921-200 | 4/29/2021 | 1610 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Kamina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502207 / 1502706 / 1502708 / 1502709 / 1598284 / 1598295

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.034 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1191-OS-042921-100 | 4/29/2021 | 1738 | G | Water | N | N | X | 2 | |
| PWS1191-OS-042921-200 | 4/29/2021 | 1720 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1147-OS-042921-100 | 4/29/2021 | 840 | G | Water | N | N | X | 2 | |
| PWS1147-OS-042921-200 | 4/29/2021 | 845 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-042921 | 4/29/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1089-OS-042921-100 | 4/29/2021 | 925 | G | Water | N | N | X | 2 | |
| PWS1089-OS-042921-200 | 4/29/2021 | 930 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1101-OS-042921-100 | 4/29/2021 | 1010 | G | Water | N | Y | X | 2 | |
| PWS1101-OS-042921-200 | 4/29/2021 | 1015 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1092-OS-042921-100 | 4/29/2021 | 1130 | G | Water | N | N | X | 2 | |
| PWS1092-OS-042921-200 | 4/29/2021 | 1135 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | EMSR |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 1598280/1598281/1598282/1598283/1502707 1502706/1502708/1502709/~~1502~~ 1598284/1598285 SS1414

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.035 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1125-OS-042921-100 | 4/29/2021 | 1210 | G | Water | N | N | X | 2 | |
| PWS1125-OS-042921-200 | 4/29/2021 | 1215 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1155-OS-042921-100 | 4/29/2021 | 1320 | G | Water | N | N | X | 2 | |
| PWS1155-OS-042921-200 | 4/29/2021 | 1325 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1127-OS-042921-100 | 4/29/2021 | 1405 | G | Water | N | N | X | 2 | |
| PWS1127-OS-042921-200 | 4/29/2021 | 1410 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1106-OS-042921-100 | 4/29/2021 | 1450 | G | Water | N | N | X | 2 | |
| PWS1106-OS-042921-200 | 4/29/2021 | 1455 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1161-OS-042921-100 | 4/29/2021 | 1610 | G | Water | N | N | X | 2 | |
| PWS1161-OS-042921-200 | 4/29/2021 | 1615 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1114-OS-042921-100 | 4/29/2021 | 1715 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 1130 | Wood | | 5/4/21 1000 | EDASC |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707
1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.036 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 4 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1114-OS-042921-200 | 4/29/2021 | 1720 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1070-OS-043021-100 | 4/30/2021 | 934 | G | Water | N | N | X | 2 | |
| PWS1070-OS-043021-200 | 4/30/2021 | 907 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1073-OS-043021-100 | 4/30/2021 | 1011 | G | Water | N | N | X | 2 | |
| PWS1073-OS-043021-200 | 4/30/2021 | 954 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1174-OS-043021-100 | 4/30/2021 | 1058 | G | Water | N | N | X | 2 | |
| PWS1174-OS-043021-200 | 4/30/2021 | 1039 | G | Water | N | Y | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1019-OS-043021-100 | 4/30/2021 | 1236 | G | Water | N | Y | X | 2 | |
| PWS1019-OS-043021-200 | 4/30/2021 | 1214 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1044-OS-043021-100 | 4/30/2021 | 1440 | G | Water | N | N | X | 2 | |
| PWS1044-OS-043021-200 | 4/30/2021 | 1415 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280/1598281/1598282/1598283/1502707 1502706/1502708/1502709/1598284/1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 1.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.037 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 5 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | N | | N | | |
| PWS1034-IS-043021-100 | 4/30/2021 | 1542 | G | Water | N | N | X | 2 | |
| PWS1034-IS-043021-200 | 4/30/2021 | 1522 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1036-OS-043021-100 | 4/30/2021 | 1635 | G | Water | N | N | X | 2 | |
| PWS1036-OS-043021-200 | 4/30/2021 | 1612 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1023-OS-043021-100 | 4/30/2021 | 1713 | G | Water | N | N | X | 2 | |
| PWS1023-OS-043021-200 | 4/30/2021 | 1654 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1088-OS-043021-100 | 4/30/2021 | 1831 | G | Water | N | N | X | 2 | |
| PWS1088-OS-043021-200 | 4/30/2021 | 1804 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1103-OS-043021-100 | 4/30/2021 | 845 | G | Water | N | Y | X | 2 | |
| PWS1103-OS-043021-200 | 4/30/2021 | 850 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-MS02-043021 | 4/30/2021 | 845 | G | Water | N | N | X | 2 | Parent sample is: PWS1103-OS-043021-100 |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | Eurofins |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 / 1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: -1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.038 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 6 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS-MSD02-043021 | 4/30/2021 | 845 | G | Water | N | Y | X | 2 | Parent sample is: PWS1103-OS-043021-100 |
| PWS1134-OS-043021-100 | 4/30/2021 | 935 | G | Water | N | N | X | 2 | |
| PWS1134-OS-043021-200 | 4/30/2021 | 940 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS-FD02-043021 | 4/30/2021 | 1202 | G | Water | N | N | X | 2 | |
| PWS1135-OS-043021-100 | 4/30/2021 | 1000 | G | Water | N | N | X | 2 | |
| PWS1135-OS-043021-200 | 4/30/2021 | 1005 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1136-OS-043021-100 | 4/30/2021 | 1030 | G | Water | N | N | X | 2 | |
| PWS1136-OS-043021-200 | 4/30/2021 | 1035 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1195-OS-043021-100 | 4/30/2021 | 1150 | G | Water | N | N | X | 2 | |
| PWS1195-OS-043021-200 | 4/30/2021 | 1155 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1189-OS-043021-100 | 4/30/2021 | 1340 | G | Water | N | N | X | 2 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Caseff | 5-3-21 @ 11:30 | Wood | | 5/4/21 1010 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280 / 1598281 / 1598282 / 1598283 / 1502707 1502706 / 1502708 / 1502709 / 1598284 / 1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.5, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/SEW/CAS/SMW | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.039 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 7 of 7 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1189-OS-043021-200 | 4/30/2021 | 1345 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1110-IS-050121-100 | 5/1/2021 | 1330 | G | Water | N | N | X | 2 | |
| PWS1110-IS-050121-200 | 5/1/2021 | 1258 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1063-OS-050121-100 | 5/1/2021 | 1431 | G | Water | N | N | X | 2 | |
| PWS1063-OS-050121-200 | 5/1/2021 | 1405 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1160-OS-050121-100 | 5/1/2021 | 1729 | G | Water | N | N | X | 2 | |
| PWS1160-OS-050121-200 | 5/1/2021 | 1706 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-3-21@1130 | Wood | | 5/4/21 1010 | FedEx |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1598280/1598281/1598282/1598283/1502707
1502706/1502708/1502709/1598284/1598285

Cooler Temperature(s) °C and Other Remarks: 1.0, 1.3, 0.8, 2.6, 1.1

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.042 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 1 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

320-73508 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1130-OS-050621-100 | 5/6/2021 | 1432 | G | Water | N | N | X | 2 | |
| PWS1130-OS-050621-200 | 5/6/2021 | 1408 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1203-OS-050621-100 | 5/6/2021 | 1532 | G | Water | N | N | X | 2 | |
| PWS1203-OS-050621-200 | 5/6/2021 | 1513 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1194-OS-050621-100 | 5/6/2021 | 1630 | G | Water | N | N | X | 2 | |
| PWS1194-OS-050621-200 | 5/6/2021 | 1611 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1154-OS-050621-100 | 5/6/2021 | 1710 | G | Water | N | N | X | 2 | |
| PWS1154-OS-050621-200 | 5/6/2021 | 1650 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1100-IS-050621-100 | 5/6/2021 | 1831 | G | Water | N | N | X | 2 | |
| PWS1100-IS-050621-200 | 5/6/2021 | 1813 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1185-OS-050721-100 | 5/7/2021 | 1153 | G | Water | N | N | X | 2 | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-10-21@1800 | Wood | | 5/11/21 1010 | Eurofins |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: 1588908/1588909/1588910/1588911

Cooler Temperature(s) °C and Other Remarks: 2.5, 1.9

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.043 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 2 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1185-OS-050721-200 | 5/7/2021 | 1133 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1193-OS-050721-100 | 5/7/2021 | 1229 | G | Water | N | N | X | 2 | |
| PWS1193-OS-050721-200 | 5/7/2021 | 1211 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1196-OS-050721-100 | 5/7/2021 | 1412 | G | Water | N | N | X | 2 | |
| PWS1196-OS-050721-200 | 5/7/2021 | 1352 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1113-OS-050721-100 | 5/7/2021 | 1514 | G | Water | N | N | X | 2 | |
| PWS1113-OS-050721-200 | 5/7/2021 | 1455 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1112-OS-050721-100 | 5/7/2021 | 1540 | G | Water | N | N | X | 2 | |
| PWS1112-OS-050721-200 | 5/7/2021 | 1518 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |
| PWS1197-OS-050721-100 | 5/7/2021 | 1640 | G | Water | N | N | X | 2 | |
| PWS1197-OS-050721-200 | 5/7/2021 | 1619 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | Karina Casey | 5-10-21 @ 1800 | Wood | | 5/11/21 1010 | Eurofins |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: △ Yes △ No
Custody Seal No.: 1588108 / 1588109 / 1588110 / 1588111
Cooler Temperature(s) °C and Other Remarks: 2.5, 1.9

Ver: 01/16/2019

**Eurofins TestAmerica, Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information | Sampler: KMC/RAB | Lab PM: Alltucker, David R | Carrier Tracking No(s): FedEx | COC No: 531125.044 |
|---|---|---|---|---|
| Client Contact: Evan Thomas | Phone: (248) 228-6293 | E-Mail: David.Alltucker@Eurofinset.com | | Page: 3 of 3 |
| Company: Wood E&I Solutions Inc | | | | Job #: |
| Address: 16N Carroll Street, Suite 700 | Due Date Requested: | | | |
| City: Madsion | TAT Requested (days): 10 | | | |
| State, Zip: WI, 53703 | | | | |
| Phone: (608) 819-6495 | PO #: C012704155 | | | |
| Email: Evan.Thomas@woodplc.com | WO #: | | | |
| Project Name: WDNR- Campbell PW Sampling | Project #: 32017587 | | | |
| Site: Campbell, WI | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PFC_IDA_WI - PFAS, Extended List (36 Analytes) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | | |
| PWS1198-IS-050721-100 | 5/7/2021 | 1722 | G | Water | N | N | X | 2 | |
| PWS1198-IS-050721-200 | 5/7/2021 | 1706 | G | Water | N | N | X | 2 | HOLD, pending analysis of -100 sample |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: PWS1106-OS-042621-100 and PWS1106-OS-042621-200 removed

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Karina Casey | 5-10-21 @1800 | Wood | | 5/11/21 1010 | Eurofins |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|
| | 1588908 / 1588909 / 1588910 / 1588911 | 2.5 / 1.9 |

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-2

**Login Number: 72788**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1645830, 825, 831, 834, 827 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-2

**Login Number: 72888**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1645835, 1645836, 1645839, 1645840, 1645844, 1645843, 1645841, 1645842, 1598279, |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | False | Refer to Job Narrative for details. |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | False | Refer to Job Narrative for details. |
| 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. | N/A | |
| 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 | |

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-2

**Login Number: 73077**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1502712, 1502713, 1502714, 1502715, 1502716, 1502717, 1502718, 1502719, 1502720. |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-2

**Login Number: 73172**
**List Number: 1**
**Creator: Alltucker, David R**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1598280/1598281/1598282/1598283/1502707/1502706/1502708/1502709/1598284/1598285 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

# Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 320-72788-2

**Login Number: 73508**
**List Number: 1**
**Creator: Oropeza, Salvador**

**List Source: Eurofins TestAmerica, Sacramento**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | 1588911/1588910/1588909/1588908 |
| Sample custody seals, if present, are intact. | N/A | |
| 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. | N/A | |
| 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 | |

# APPENDIX B

# Data Validation Summaries

# PFAS Data Validation Checklist

| Laboratory Reports: J72888-1/J72788-2 | Yes | No | NA |
|---|---|---|---|
| **I Sample Handling:** | | | |
| 1. Were samples received by the laboratory in containers with PTFE components? | | X | |
| **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. Were tissue samples in a frozen state when received by the laboratory? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. Were solid and/or aqueous field samples extracted within 28 days from collection? | X | | |
| b. Were tissue samples extracted within 1 year from collection? | | | X |
| c. Were extracts analyzed within 30 days from extraction? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II Field Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated equipment and/or field blanks? | | | X |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | | X[1] | |
| b. Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | X | | |
| c. Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | | X[2] | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III Laboratory Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated laboratory blank? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. Solid and Aqueous Samples: | | | |
| i 50 to 150% for low-level spikes | | | X |
| ii 60 to 135% for mid- or high-level spikes | X | | |
| b. Tissue Samples: | | | |
| i 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii 60 to 135% for all other PFAS | | | X |
| **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| **If No and recovery is high**: J qualify detected results (J-HL) | | | |

| | Laboratory Reports: J72888-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | X | | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | X | | |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | X | | |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J72888-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| | a. 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| | b. 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

X[1] The RPD between FOSA results from sample PWS1049-OS-042122-100 and its field duplicate PWS-FD01-042221 was high at 173%. Wood J qualified the detected FOSA results from these samples because of potential sampling and/or analytical imprecision.

X[2] The difference between N-EtFOSE results from sample PWS1049-OS-042122-100 and its field duplicate PWS-FD01-042221 was greater than the average RL. Wood J qualified the detected and UJ qualified the non-detected N-EtFOSE results from these samples because of potential sampling and/or analytical imprecision.

**Table 1**
**Field Samples Submitted to Eurofins Lancaster Laboratories**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1049-OS-042122-100 | 4/22/21 8:23 | 320-72888-1 | |
| PWS1049-OS-042122-200 | 4/22/21 8:01 | 320-72888-2 | Field blank |
| PWS-FD01-042221 | 4/22/21 12:01 | 320-72888-3 | Field duplicate of PWS1049-OS-042122-100 |
| PWS1051-OS-042221-100 | 4/22/21 11:35 | 320-72888-4 | |
| PWS1051-OS-042221-200 | 4/22/21 11:09 | 320-72888-5 | Field blank |
| PWS1047-OS-042221-100 | 4/22/21 12:38 | 320-72888-6 | |
| PWS1047-OS-042221-200 | 4/22/21 11:58 | 320-72888-7 | Field blank |
| PWS1055-OS-042221-100 | 4/22/21 13:54 | 320-72888-8 | |
| PWS1055-OS-042221-200 | 4/22/21 13:23 | 320-72888-9 | Field blank |
| PWS1054-OS-042221-100 | 4/22/21 14:43 | 320-72888-10 | |
| PWS1048-OS-042221-100 | 4/22/21 18:47 | 320-72888-12 | |
| PWS1048-OS-042221-200 | 4/22/21 18:25 | 320-72888-13 | Field blank |
| PWS1152-OS-042221-100 | 4/22/21 8:25 | 320-72888-14 | |
| PWS-FD02-042221 | 4/22/21 12:02 | 320-72888-16 | Field duplicate of PWS1152-OS-042221-100 |
| PWS1151-OS-042221-100 | 4/22/21 9:20 | 320-72888-17 | MS/MSD |
| PWS1139-OS-042221-100 | 4/22/21 10:35 | 320-72888-19 | |
| PWS1146-OS-042221-100 | 4/22/21 11:45 | 320-72888-21 | |
| PWS1138-OS-042221-100 | 4/22/21 12:35 | 320-72888-23 | |
| PWS1120-OS-042221-100 | 4/22/21 13:35 | 320-72888-25 | |
| PWS1122-OS-042221-100 | 4/22/21 14:40 | 320-72888-27 | |
| PWS1119-OS-042221-100 | 4/22/21 15:30 | 320-72888-29 | |
| PWS1173-OS-042221-100 | 4/22/21 16:30 | 320-72888-31 | |
| PWS1030-OS-042321-100 | 4/23/21 8:40 | 320-72888-33 | |
| PWS-FD01-042321 | 4/23/21 12:01 | 320-72888-35 | Field duplicate of PWS1030-OS-042321-100 |
| PWS1016-OS-042321-100 | 4/23/21 9:40 | 320-72888-36 | MS/MSD |
| PWS1016-OS-042321-200 | 4/23/21 9:00 | 320-72888-37 | Field blank |
| PWS1037-OS-042321-100 | 4/23/21 10:25 | 320-72888-38 | |
| PWS1041-OS-042321-100 | 4/23/21 11:30 | 320-72888-40 | |
| PWS1041-OS-042321-200 | 4/23/21 11:00 | 320-72888-41 | Field blank |
| PWS1045-OS-042321-100 | 4/23/21 12:45 | 320-72888-42 | |
| PWS1045-OS-042321-200 | 4/23/21 12:10 | 320-72888-43 | Field blank |
| PWS1057-OS-042321-100 | 4/23/21 13:25 | 320-72888-44 | |
| PWS1057-OS-042321-200 | 4/23/21 13:05 | 320-72888-45 | Field blank |
| PWS1056-OS-042321-100 | 4/23/2021 14:45 | 320-72888-46 | |
| PWS1058-OS-042321-100 | 4/23/2021 15:40 | 320-72888-48 | |
| PWS1058-OS-042321-200 | 4/23/2021 15:15 | 320-72888-49 | Field blank |
| PWS1061-OS-042321-100 | 4/23/2021 16:35 | 320-72888-50 | |
| PWS1060-OS-042321-100 | 4/23/2021 17:10 | 320-72888-52 | |
| PWS1060-OS-042321-200 | 4/23/2021 16:50 | 320-72888-53 | Field blank |
| PWS1039-OS-042321-100 | 4/23/2021 19:05 | 320-72888-54 | |
| PWS1176-OS-042321-100 | 4/23/2021 8:40 | 320-72888-56 | |
| PWS1142-OS-042321-100 | 4/23/2021 9:40 | 320-72888-58 | |
| PWS-FD02-042321 | 4/23/2021 12:02 | 320-72888-60 | Field duplicate of PWS1142-OS-042321-100 |
| PWS1137-OS-042321-100 | 4/23/2021 10:20 | 320-72888-61 | |

**Table 1**
**Field Samples Submitted to Eurofins Lancaster Laboratories**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1131-OS-042321-100 | 4/23/2021 11:15 | 320-72888-63 | |
| PWS1126-OS-042321-100 | 4/23/2021 12:30 | 320-72888-65 | |
| PWS1126-OS-042321-200 | 4/23/2021 12:35 | 320-72888-66 | Field blank |
| PWS1123-OS-042321-100 | 4/23/2021 13:10 | 320-72888-67 | |
| PWS1117-OS-042321-100 | 4/23/2021 14:25 | 320-72888-69 | |
| PWS1107-OS-042321-100 | 4/23/2021 15:15 | 320-72888-71 | |
| PWS1107-OS-042321-200 | 4/23/2021 15:20 | 320-72888-72 | Field blank |
| PWS1062-OS-042421-100 | 4/24/2021 8:45 | 320-72888-73 | MS/MSD |
| PWS1064-OS-042421-100 | 4/24/2021 9:30 | 320-72888-75 | |
| PWS-FD01-042421 | 4/24/2021 12:01 | 320-72888-77 | Field duplicate of PWS1064-OS-042421-100 |
| PWS1067-OS-042421-100 | 4/24/2021 10:15 | 320-72888-78 | |
| PWS1069-OS-042421-100 | 4/24/2021 11:35 | 320-72888-80 | |
| PWS1059-OS-042421-100 | 4/24/2021 12:35 | 320-72888-82 | |
| PWS1059-OS-042421-200 | 4/24/2021 12:05 | 320-72888-83 | Field blank |
| PWS1068-OS-042421-100 | 4/24/2021 13:35 | 320-72888-84 | |
| PWS1072-OS-042421-100 | 4/24/2021 14:15 | 320-72888-86 | |
| PWS1074-IS-042421-100 | 4/24/2021 15:50 | 320-72888-88 | |
| PWS1065-OS-042421-100 | 4/24/2021 16:30 | 320-72888-90 | |
| PWS1075-OS-042421-100 | 4/24/2021 17:50 | 320-72888-92 | |
| PWS1079-OS-042421-100 | 4/24/2021 18:30 | 320-72888-94 | |
| PWS1108-OS-042421-100 | 4/24/2021 8:50 | 320-72888-96 | |
| PWS1109-OS-042421-100 | 4/24/2021 9:25 | 320-72888-98 | MS/MSD |
| PWS1159-OS-042421-100 | 4/24/2021 10:05 | 320-72888-100 | |
| PWS-FD02-042421 | 4/24/2021 12:02 | 320-72888-102 | Field duplicate of PWS1159-OS-042421-100 |
| PWS1133-OS-042421-100 | 4/24/2021 11:15 | 320-72888-103 | |
| PWS1133-OS-042421-200 | 4/24/2021 11:20 | 320-72888-104 | Field blank |
| PWS1116-OS-042421-100 | 4/24/2021 12:05 | 320-72888-105 | |
| PWS1175-OS-042421-100 | 4/24/2021 13:50 | 320-72888-107 | |
| PWS1143-OS-042421-100 | 4/24/2021 14:25 | 320-72888-109 | |
| PWS1162-OS-042421-100 | 4/24/2021 15:30 | 320-72888-111 | |
| PWS1156-OS-042421-100 | 4/24/2021 16:55 | 320-72888-113 | |
| PWS1053-OS-042521-100 | 4/25/2021 9:00 | 320-72888-115 | MS/MSD |
| PWS1053-OS-042521-200 | 4/25/2021 8:25 | 320-72888-116 | Field blank |
| PWS1077-OS-042521-100 | 4/25/2021 9:35 | 320-72888-117 | |
| PWS-FD01-042521 | 4/25/2021 12:01 | 320-72888-119 | Field duplicate of PWS1077-OS-042521-100 |
| PWS1083-OS-042521-100 | 4/25/2021 10:25 | 320-72888-120 | |
| PWS1046-OS-042521-100 | 4/25/2021 11:35 | 320-72888-122 | |
| PWS1046-OS-042521-200 | 4/25/2021 11:10 | 320-72888-123 | Field blank |
| PWS1081-OS-042521-100 | 4/25/2021 12:40 | 320-72888-124 | |
| PWS1081-OS-042521-200 | 4/25/2021 12:20 | 320-72888-125 | Field blank |
| PWS1029-OS-042521-100 | 4/25/2021 14:40 | 320-72888-126 | |
| PWS1144-OS-042521-100 | 4/25/2021 9:50 | 320-72888-130 | |
| PWS1165-OS-042521-100 | 4/25/2021 11:35 | 320-72888-132 | |
| PWS-FD02-042521 | 4/25/2021 12:02 | 320-72888-134 | Field duplicate of PWS1165-OS-042521-100 |

**Table 1**
**Field Samples Submitted to Eurofins Lancaster Laboratories**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1078-OS-042521-100 | 4/25/2021 15:25 | 320-72888-137 | |

**Note:**
MS/MSD = matrix spike/matrix spike duplicate

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1049-OS-042122-100 and PWS-FD01-042221 | | | | | |
| PFBA | 4.4 ng/L | 39 | 40 | 2.5% | |
| PFPeA | 1.8 ng/L | 7.1 | 6.7 | 5.8% | |
| PFHxA | 1.8 ng/L | 5.5 | 5.4 | 1.8% | |
| PFHpA | 1.8 ng/L | 1.8 | 1.8 | 0.0% | |
| PFOA | 1.8 ng/L | 21 | 21 | 0.0% | |
| PFBS | 1.8 ng/L | 3.8 | 3.9 | 2.6% | |
| PFPeS | 1.8 ng/L | 1.0 J | 0.96 J | 4.1% | |
| PFHxS | 1.8 ng/L | 6.0 | 5.7 | 5.1% | |
| PFHpS | 1.8 ng/L | 0.27 J | 0.33 J | 20% | |
| PFOS | 1.8 ng/L | 7.4 | 10 | 30% | |
| FOSA | 1.8 ng/L | 0.86 J | 12 | 173% | J-FD |
| N-EtFOSE | 1.8 ng/L | 1.7 U | 7.6 | NC | UJ/J-FD |
| 8:2 FTS | 1.8 ng/L | 1.7 U | 0.53 J | NC | ± RL |
| 10:2 FTS | 1.8 ng/L | 1.7 U | 0.97 J | NC | ± RL |
| Samples PWS1152-OS-042221-100 and PWS-FD02-042221 | | | | | |
| PFBA | 4.5 ng/L | 3.7 J | 3.1 J | 18% | |
| PFHxA | 1.8 ng/L | 1.8 U | 0.51 J | NC | ± RL |
| PFOA | 1.8 ng/L | 0.78 J | 0.83 J | 6.2% | |
| PFBS | 1.8 ng/L | 2.6 | 2.5 | 3.9% | |
| PFPeS | 1.8 ng/L | 0.28 J | 1.8 U | NC | ± RL |
| PFHxS | 1.8 ng/L | 1.0 J | 1.1 J | 9.5% | |
| PFOS | 1.8 ng/L | 3.0 J | 3.0 | 0.0% | |
| Samples PWS1030-OS-042321-100 and PWS-FD01-042321 | | | | | |
| PFBA | 4.6 ng/L | 15 | 15 | 0.0% | |
| PFPeA | 1.9 ng/L | 1.9 | 2.4 | 23% | |
| PFHxA | 1.9 ng/L | 2.0 | 1.7 J | 16% | |
| PFOA | 1.9 ng/L | 5.4 | 5.2 | 3.8% | |
| PFNA | 1.9 ng/L | 1.8 U | 0.50 J | NC | ± RL |
| PFBS | 1.9 ng/L | 2.8 | 2.5 | 11% | |
| PFPeS | 1.9 ng/L | 0.42 J | 0.73 J | 54% | ± RL |
| PFHxS | 1.9 ng/L | 3.3 | 3.4 | 3.0% | |
| PFOS | 1.9 ng/L | 7.6 | 8.3 | 8.8% | |
| FOSA | 1.9 ng/L | 1.1 J | 1.5 J | 31% | ± RL |

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1142-OS-042321-100 and PWS-FD02-042321 | | | | | |
| PFBA | 4.7 ng/L | 4.8 | 4.8 | 0.0% | |
| PFPeA | 1.9 ng/L | 1.7 J | 1.6 J | 6.1% | |
| PFHxA | 1.9 ng/L | 2.3 | 2.3 | 0.0% | |
| PFHpA | 1.9 ng/L | 1.6 J | 1.8 J | 12% | |
| PFOA | 1.9 ng/L | 2.8 | 2.8 | 0.0% | |
| PFBS | 1.9 ng/L | 2.2 | 1.9 | 15% | |
| PFPeS | 1.9 ng/L | 0.70 J | 0.71 J | 1.4% | |
| PFHxS | 1.9 ng/L | 3.4 | 3.3 | 3.0% | |
| PFOS | 1.9 ng/L | 5.5 J | 5.6 J | 1.8% | |
| FOSA | 1.9 ng/L | 1.8 | 1.8 J | 0.0% | |
| Samples PWS1064-OS-042421-100 and PWS-FD01-042421 | | | | | |
| PFBA | 4.3 ng/L | 59 | 59 | 0.0% | |
| PFOA | 1.7 ng/L | 2.0 | 2.3 | 14% | |
| PFBS | 1.7 ng/L | 1.9 | 2.1 | 10% | |
| PFPeS | 1.7 ng/L | 1.7 | 1.6 J | 6.1% | |
| PFHxS | 1.7 ng/L | 6.5 | 6.1 | 6.3% | |
| PFOS | 1.7 ng/L | 3.6 | 2.8 | 25% | |
| FOSA | 1.7 ng/L | 1.7 U | 1.1 J | NC | ± RL |
| Samples PWS1159-OS-042421-100 and PWS-FD02-042421 | | | | | |
| PFBS | 1.7 ng/L | 0.55 J | 0.80 J | 37% | ± RL |
| PFHxS | 1.7 ng/L | 0.55 J | 0.56 J | 1.8% | |
| PFOS | 1.7 ng/L | 0.54 J | 1.7 U | NC | ± RL |
| Samples PWS1077-OS-042521-100 and PWS-FD01-042521 | | | | | |
| PFBS | 1.8 ng/L | 1.3 J | 1.3 J | 0% | |
| PFPeS | 1.8 ng/L | 0.71 J | 0.61 J | 15% | |
| PFHxS | 1.8 ng/L | 1.7 J | 1.7 | 0.0% | |
| PFOS | 1.8 ng/L | 1.8 U | 0.79 J | NC | ± RL |
| FOSA | 1.8 ng/L | 1.2 J | 1.2 J | 0.0% | |
| Samples PWS1165-OS-042521-100 and PWS-FD02-042521 | | | | | |
| PFHxA | 1.8 ng/L | 0.56 J | 1.8 U | NC | ± RL |
| PFBS | 1.8 ng/L | 0.83 J | 0.68 J | 20% | |
| PFPeS | 1.8 ng/L | 1.8 U | 0.29 J | NC | ± RL |
| PFHxS | 1.8 ng/L | 0.60 J | 0.72 J | 18% | |
| PFOS | 1.8 ng/L | 0.82 J | 0.75 J | 8.9% | |
| FOSA | 1.8 ng/L | 1.6 J | 1.4 J | 13% | |

**Table 2**
**Precision Between Detections in Primary Samples and their Field Duplicates**

**Notes:**
10:2 FTS = 10:2 fluorotelomer sulfonic acid
8:2 FTS = 8:2 fluorotelomer sulfonic acid
FOSA = perfluorooctanesulfonamide
NC = not calculable
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol
ng/L = nanograms per liter
PFBA = perfluorobutanoic acid
PFBS = perfluorobutanesulfonic acid
PFHpA = perfluoroheptanoic acid
PFHpS = perfluoroheptanesulfonic acid
PFHxA = perfluorohexanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanoic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid
PFPeA = perfluoropentanoic acid
PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
U = The analyte was not detected.
UJ = The analyte was not detected and the reported result is an estimated value.

**Reason Codes:**
FD = Imprecision between primary and field duplicate results.
± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1016-OS-042122-100 | Perfluoropentanesulfonic acid | 0.93 ng/L | J DL |
| PWS1016-OS-042122-100 | Perfluoroheptanesulfonic acid | 0.71 ng/L | J DL |
| PWS1029-OS-042521-100 | Perfluorodecanoic acid | 0.70 ng/L | J DL |
| PWS1029-OS-042521-100 | Perfluorohexanesulfonic acid | 0.60 ng/L | J DL |
| PWS1029-OS-042521-100 | Perfluorobutanoic acid | 3.4 ng/L | J DL |
| PWS1029-OS-042521-100 | Perfluorononanoic acid | 0.31 ng/L | J DL |
| PWS1030-OS-042321-100 | Perfluoropentanesulfonic acid | 0.42 ng/L | J DL |
| PWS1030-OS-042321-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1037-OS-042321-100 | Perfluoropentanoic acid | 0.98 ng/L | J DL |
| PWS1037-OS-042321-100 | Perfluoropentanesulfonic acid | 0.52 ng/L | J DL |
| PWS1037-OS-042321-100 | Perfluorohexanoic acid | 0.80 ng/L | J DL |
| PWS1039-OS-042321-100 | Perfluoropentanoic acid | 1.0 ng/L | J DL |
| PWS1039-OS-042321-100 | Perfluoropentanesulfonic acid | 0.81 ng/L | J DL |
| PWS1039-OS-042321-100 | Perfluorohexanoic acid | 0.90 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluoropentanoic acid | 1.4 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluoropentanesulfonic acid | 0.50 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluorohexanoic acid | 1.4 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluorohexanesulfonic acid | 1.8 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluoroheptanoic acid | 0.67 ng/L | J DL |
| PWS1041-OS-042321-100 | Perfluorooctane sulfonamide | 1.8 ng/L | J DL |
| PWS1045-OS-042321-100 | Perfluoropentanesulfonic acid | 0.90 ng/L | J DL |
| PWS1045-OS-042321-100 | Perfluoroheptanoic acid | 1.2 ng/L | J DL |
| PWS1046-OS-042521-100 | Perfluoropentanesulfonic acid | 0.58 ng/L | J DL |
| PWS1046-OS-042521-100 | Perfluorodecanoic acid | 0.39 ng/L | J DL |
| PWS1046-OS-042521-100 | Perfluorooctane sulfonamide | 0.88 ng/L | J DL |
| PWS1047-OS-042221-100 | Perfluoroheptanesulfonic acid | 0.46 ng/L | J DL |
| PWS1047-OS-042221-100 | Perfluorooctane sulfonamide | 0.95 ng/L | J DL |
| PWS1048-OS-042221-100 | Perfluoropentanesulfonic acid | 1.1 ng/L | J DL |
| PWS1048-OS-042221-100 | Perfluoroheptanoic acid | 1.6 ng/L | J DL |
| PWS1048-OS-042221-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1049-OS-042122-100 | N-EtFOSE | 1.7 ng/L | UJ FD |
| PWS1049-OS-042122-100 | Perfluoropentanesulfonic acid | 1.0 ng/L | J DL |
| PWS1049-OS-042122-100 | Perfluoroheptanesulfonic acid | 0.27 ng/L | J DL |
| PWS1049-OS-042122-100 | Perfluorooctane sulfonamide | 0.86 ng/L | J DL, FD |
| PWS1051-OS-042221-100 | Perfluoroheptanoic acid | 1.5 ng/L | J DL |
| PWS1051-OS-042221-100 | Perfluoroheptanesulfonic acid | 0.58 ng/L | J DL |
| PWS1051-OS-042221-100 | Perfluorooctane sulfonamide | 1.7 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluorooctanesulfonic acid | 3.4 ng/L | J EMPC |
| PWS1151-OS-042221-100 | Perfluoropentanesulfonic acid | 0.46 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluorohexanoic acid | 0.63 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluorooctanoic acid | 1.4 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluorobutanoic acid | 3.3 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluoroheptanoic acid | 0.25 ng/L | J DL |
| PWS1151-OS-042221-100 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |
| PWS1053-OS-042521-100 | Perfluorodecanoic acid | 0.65 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1053-OS-042521-100 | Perfluoroheptanesulfonic acid | 0.50 ng/L | J DL |
| PWS1053-OS-042521-100 | Perfluorononanoic acid | 0.34 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluoropentanoic acid | 1.5 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluoropentanesulfonic acid | 0.60 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluorohexanoic acid | 1.5 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluorodecanoic acid | 0.29 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluoroheptanoic acid | 0.55 ng/L | J DL |
| PWS1054-OS-042221-100 | Perfluorooctane sulfonamide | 1.0 ng/L | J DL |
| PWS1055-OS-042221-100 | Perfluoropentanesulfonic acid | 0.72 ng/L | J DL |
| PWS1055-OS-042221-100 | Perfluorohexanoic acid | 0.74 ng/L | J DL |
| PWS1055-OS-042221-100 | Perfluorodecanoic acid | 0.33 ng/L | J DL |
| PWS1055-OS-042221-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1056-OS-042321-100 | Perfluoropentanoic acid | 0.79 ng/L | J DL |
| PWS1056-OS-042321-100 | Perfluoropentanesulfonic acid | 0.58 ng/L | J DL |
| PWS1056-OS-042321-100 | Perfluorohexanoic acid | 1.0 ng/L | J DL |
| PWS1056-OS-042321-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1057-OS-042321-100 | Perfluoropentanesulfonic acid | 1.2 ng/L | J DL |
| PWS1057-OS-042321-100 | Perfluorodecanoic acid | 0.32 ng/L | J DL |
| PWS1057-OS-042321-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL |
| PWS1058-OS-042321-100 | Perfluorooctanesulfonic acid | 5.9 ng/L | J EMPC |
| PWS1058-OS-042321-100 | Perfluoropentanoic acid | 1.2 ng/L | J DL |
| PWS1058-OS-042321-100 | Perfluorohexanoic acid | 0.66 ng/L | J DL |
| PWS1058-OS-042321-100 | Perfluoroheptanesulfonic acid | 0.38 ng/L | J DL |
| PWS1059-OS-042421-100 | Perfluorooctanesulfonic acid | 5.4 ng/L | J EMPC |
| PWS1059-OS-042421-100 | Perfluoropentanoic acid | 1.1 ng/L | J DL |
| PWS1059-OS-042421-100 | Perfluorohexanoic acid | 1.1 ng/L | J DL |
| PWS1059-OS-042421-100 | Perfluoroheptanesulfonic acid | 0.65 ng/L | J DL |
| PWS1059-OS-042421-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1060-OS-042321-100 | Perfluorooctanesulfonic acid | 8.4 ng/L | J EMPC |
| PWS1060-OS-042321-100 | Perfluorohexanoic acid | 0.94 ng/L | J DL |
| PWS1060-OS-042321-100 | Perfluoroheptanoic acid | 0.52 ng/L | J DL |
| PWS1060-OS-042321-100 | Perfluoroheptanesulfonic acid | 0.53 ng/L | J DL |
| PWS1061-OS-042321-100 | Perfluoropentanesulfonic acid | 0.69 ng/L | J DL |
| PWS1061-OS-042321-100 | Perfluorobutanesulfonic acid | 1.7 ng/L | J DL |
| PWS1061-OS-042321-100 | Perfluorooctane sulfonamide | 0.93 ng/L | J DL |
| PWS1062-OS-042421-100 | Perfluoropentanoic acid | 0.66 ng/L | J DL |
| PWS1062-OS-042421-100 | Perfluoropentanesulfonic acid | 1.3 ng/L | J DL |
| PWS1062-OS-042421-100 | Perfluorohexanoic acid | 1.1 ng/L | J DL |
| PWS1065-OS-042421-100 | Perfluoropentanesulfonic acid | 1.2 ng/L | J DL |
| PWS1065-OS-042421-100 | Perfluoroheptanoic acid | 0.70 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluoropentanesulfonic acid | 0.34 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluorooctanoic acid | 0.93 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluorohexanesulfonic acid | 1.1 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluorobutanesulfonic acid | 1.1 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1067-OS-042421-100 | Perfluoroheptanoic acid | 0.72 ng/L | J DL |
| PWS1067-OS-042421-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1068-OS-042421-100 | Perfluorooctanesulfonic acid | 1.2 ng/L | J DL |
| PWS1068-OS-042421-100 | Perfluoropentanesulfonic acid | 1.0 ng/L | J DL |
| PWS1068-OS-042421-100 | Perfluorohexanoic acid | 0.59 ng/L | J DL |
| PWS1068-OS-042421-100 | Perfluorobutanesulfonic acid | 1.5 ng/L | J DL |
| PWS1068-OS-042421-100 | Perfluorooctane sulfonamide | 0.97 ng/L | J DL |
| PWS1069-OS-042421-100 | Perfluorobutanesulfonic acid | 0.26 ng/L | J DL |
| PWS1069-OS-042421-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1072-OS-042421-100 | Perfluorooctane sulfonamide | 0.96 ng/L | J DL |
| PWS1075-OS-042421-100 | Perfluorohexanoic acid | 0.71 ng/L | J DL |
| PWS1075-OS-042421-100 | Perfluorohexanesulfonic acid | 0.85 ng/L | J DL |
| PWS1075-OS-042421-100 | Perfluorobutanesulfonic acid | 0.56 ng/L | J DL |
| PWS1075-OS-042421-100 | Perfluorooctane sulfonamide | 1.3 ng/L | J DL |
| PWS1077-OS-042521-100 | Perfluoropentanesulfonic acid | 0.71 ng/L | J DL |
| PWS1077-OS-042521-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J DL |
| PWS1077-OS-042521-100 | Perfluorobutanesulfonic acid | 1.3 ng/L | J DL |
| PWS1077-OS-042521-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1078-OS-042521-100 | Perfluorohexanoic acid | 0.56 ng/L | J DL |
| PWS1078-OS-042521-100 | Perfluorooctanoic acid | 1.3 ng/L | J DL |
| PWS1078-OS-042521-100 | Perfluorohexanesulfonic acid | 0.84 ng/L | J DL |
| PWS1078-OS-042521-100 | Perfluorooctane sulfonamide | 1.8 ng/L | J DL |
| PWS1079-OS-042421-100 | Perfluorohexanesulfonic acid | 1.5 ng/L | J DL |
| PWS1079-OS-042421-100 | Perfluorobutanesulfonic acid | 0.93 ng/L | J DL |
| PWS1079-OS-042421-100 | Perfluorooctane sulfonamide | 1.3 ng/L | J DL |
| PWS1081-OS-042521-100 | Perfluoropentanesulfonic acid | 0.37 ng/L | J DL |
| PWS1081-OS-042521-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1081-OS-042521-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1081-OS-042521-100 | Perfluorooctane sulfonamide | 1.6 ng/L | J DL |
| PWS1083-OS-042521-100 | Perfluoropentanesulfonic acid | 0.45 ng/L | J DL |
| PWS1083-OS-042521-100 | Perfluorobutanesulfonic acid | 1.0 ng/L | J DL |
| PWS1108-OS-042421-100 | Perfluorooctane sulfonamide | 1.0 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluorooctanesulfonic acid | 0.62 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluorooctanoic acid | 1.2 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluorohexanesulfonic acid | 0.83 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluorobutanesulfonic acid | 0.35 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluoroheptanoic acid | 1.4 ng/L | J DL |
| PWS1109-OS-042421-100 | Perfluorooctane sulfonamide | 0.97 ng/L | J DL |
| PWS1116-OS-042421-100 | Perfluorooctanesulfonic acid | 2.7 ng/L | J EMPC |
| PWS1116-OS-042421-100 | Perfluoropentanoic acid | 0.58 ng/L | J DL |
| PWS1116-OS-042421-100 | Perfluoropentanesulfonic acid | 0.26 ng/L | J EMPC, DL |
| PWS1116-OS-042421-100 | Perfluorohexanoic acid | 0.75 ng/L | J DL |
| PWS1116-OS-042421-100 | Perfluorooctanoic acid | 1.4 ng/L | J DL |
| PWS1116-OS-042421-100 | Perfluorohexanesulfonic acid | 0.89 ng/L | J DL |
| PWS1116-OS-042421-100 | Perfluoroheptanoic acid | 0.40 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1116-OS-042421-100 | Perfluorooctane sulfonamide | 1.6 ng/L | J DL |
| PWS1117-OS-042321-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1117-OS-042321-100 | Perfluorohexanesulfonic acid | 0.55 ng/L | J DL |
| PWS1117-OS-042321-100 | Perfluorobutanesulfonic acid | 1.4 ng/L | J DL |
| PWS1117-OS-042321-100 | Perfluoroheptanoic acid | 1.3 ng/L | J DL |
| PWS1117-OS-042321-100 | Perfluorooctane sulfonamide | 1.6 ng/L | J DL |
| PWS1119-OS-042221-100 | Perfluorohexanesulfonic acid | 0.81 ng/L | J DL |
| PWS1119-OS-042221-100 | Perfluorobutanoic acid | 2.8 ng/L | J DL |
| PWS1119-OS-042221-100 | Perfluorobutanesulfonic acid | 0.54 ng/L | J DL |
| PWS1119-OS-042221-100 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |
| PWS1120-OS-042221-100 | Perfluorooctanesulfonic acid | 1.9 ng/L | J EMPC |
| PWS1120-OS-042221-100 | Perfluorooctanoic acid | 0.73 ng/L | J DL |
| PWS1120-OS-042221-100 | Perfluorohexanesulfonic acid | 0.77 ng/L | J DL |
| PWS1120-OS-042221-100 | Perfluorobutanesulfonic acid | 1.6 ng/L | J DL |
| PWS1120-OS-042221-100 | Perfluoroheptanoic acid | 0.21 ng/L | J DL |
| PWS1120-OS-042221-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1122-OS-042221-100 | Perfluoropentanoic acid | 0.79 ng/L | J DL |
| PWS1122-OS-042221-100 | Perfluoropentanesulfonic acid | 0.27 ng/L | J DL |
| PWS1122-OS-042221-100 | Perfluoroheptanoic acid | 0.47 ng/L | J DL |
| PWS1122-OS-042221-100 | Perfluoroheptanesulfonic acid | 0.17 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluorooctanesulfonic acid | 3.7 ng/L | J EMPC |
| PWS1123-OS-042321-100 | Perfluoropentanoic acid | 0.69 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluoropentanesulfonic acid | 0.34 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluorohexanoic acid | 1.0 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluorodecanoic acid | 0.30 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluorobutanesulfonic acid | 1.3 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluoroheptanoic acid | 0.69 ng/L | J DL |
| PWS1123-OS-042321-100 | Perfluorooctane sulfonamide | 1.8 ng/L | J DL |
| PWS1126-OS-042321-100 | Perfluoropentanesulfonic acid | 0.54 ng/L | J DL |
| PWS1126-OS-042321-100 | Perfluoroheptanoic acid | 1.7 ng/L | J DL |
| PWS1131-OS-042321-100 | Perfluorooctanesulfonic acid | 1.6 ng/L | J EMPC, DL |
| PWS1131-OS-042321-100 | Perfluorohexanoic acid | 0.70 ng/L | J DL |
| PWS1131-OS-042321-100 | Perfluorooctanoic acid | 1.2 ng/L | J DL |
| PWS1131-OS-042321-100 | Perfluorohexanesulfonic acid | 0.86 ng/L | J DL |
| PWS1131-OS-042321-100 | Perfluorobutanoic acid | 2.9 ng/L | J DL |
| PWS1131-OS-042321-100 | Perfluorobutanesulfonic acid | 0.55 ng/L | J DL |
| PWS1133-OS-042421-100 | Perfluoropentanesulfonic acid | 0.56 ng/L | J DL |
| PWS1133-OS-042421-100 | Perfluoroheptanesulfonic acid | 0.24 ng/L | J DL |
| PWS1133-OS-042421-100 | Perfluorononanoic acid | 0.38 ng/L | J DL |
| PWS1133-OS-042421-100 | Perfluorooctane sulfonamide | 1.0 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluorohexanoic acid | 1.4 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluorooctanoic acid | 1.5 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluorohexanesulfonic acid | 0.59 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluorobutanoic acid | 2.4 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1137-OS-042321-100 | Perfluoroheptanoic acid | 0.73 ng/L | J DL |
| PWS1137-OS-042321-100 | Perfluorononanoic acid | 0.44 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluorooctanesulfonic acid | 2.9 ng/L | J EMPC |
| PWS1138-OS-042221-100 | Perfluoropentanoic acid | 0.71 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluoropentanesulfonic acid | 0.46 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluorohexanoic acid | 0.91 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluorobutanoic acid | 3.5 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluoroheptanoic acid | 0.77 ng/L | J DL |
| PWS1138-OS-042221-100 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |
| PWS1139-OS-042221-100 | Perfluorooctanesulfonic acid | 3.8 ng/L | J EMPC |
| PWS1139-OS-042221-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1139-OS-042221-100 | Perfluoropentanesulfonic acid | 0.35 ng/L | J DL |
| PWS1139-OS-042221-100 | Perfluorohexanoic acid | 1.4 ng/L | J DL |
| PWS1139-OS-042221-100 | Perfluorohexanesulfonic acid | 0.88 ng/L | J DL |
| PWS1139-OS-042221-100 | Perfluoroheptanoic acid | 0.86 ng/L | J DL |
| PWS1142-OS-042321-100 | Perfluorooctanesulfonic acid | 5.5 ng/L | J EMPC |
| PWS1142-OS-042321-100 | Perfluoropentanoic acid | 1.7 ng/L | J DL |
| PWS1142-OS-042321-100 | Perfluoropentanesulfonic acid | 0.70 ng/L | J DL |
| PWS1142-OS-042321-100 | Perfluoroheptanoic acid | 1.6 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorooctanesulfonic acid | 0.50 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluoropentanesulfonic acid | 0.33 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorohexanoic acid | 0.50 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorohexanesulfonic acid | 1.2 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorobutanesulfonic acid | 1.2 ng/L | J DL |
| PWS1143-OS-042421-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorooctanesulfonic acid | 1.1 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluoropentanoic acid | 0.52 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorohexanoic acid | 0.64 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorooctanoic acid | 1.4 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorohexanesulfonic acid | 0.66 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluoroheptanoic acid | 0.30 ng/L | J DL |
| PWS1144-OS-042521-100 | Perfluorooctane sulfonamide | 1.0 ng/L | J DL |
| PWS1146-OS-042221-100 | Perfluoropentanesulfonic acid | 0.42 ng/L | J DL |
| PWS1152-OS-042221-100 | Perfluorooctanesulfonic acid | 3.0 ng/L | J EMPC |
| PWS1152-OS-042221-100 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS1152-OS-042221-100 | Perfluorooctanoic acid | 0.78 ng/L | J DL |
| PWS1152-OS-042221-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1152-OS-042221-100 | Perfluorobutanoic acid | 3.7 ng/L | J DL |
| PWS1156-OS-042421-100 | Perfluorooctanesulfonic acid | 2.5 ng/L | J EMPC |
| PWS1156-OS-042421-100 | Perfluoropentanesulfonic acid | 0.61 ng/L | J DL |
| PWS1156-OS-042421-100 | Perfluoroheptanoic acid | 0.75 ng/L | J DL |
| PWS1156-OS-042421-100 | Perfluoroheptanesulfonic acid | 0.20 ng/L | J DL |
| PWS1156-OS-042421-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1159-OS-042421-100 | Perfluorooctanesulfonic acid | 0.54 ng/L | J DL |
| PWS1159-OS-042421-100 | Perfluorohexanesulfonic acid | 0.55 ng/L | J DL |
| PWS1159-OS-042421-100 | Perfluorobutanesulfonic acid | 0.55 ng/L | J DL |
| PWS1162-OS-042421-100 | Perfluorobutanesulfonic acid | 0.58 ng/L | J DL |
| PWS1165-OS-042521-100 | Perfluorooctanesulfonic acid | 0.82 ng/L | J EMPC, DL |
| PWS1165-OS-042521-100 | Perfluorohexanoic acid | 0.56 ng/L | J DL |
| PWS1165-OS-042521-100 | Perfluorohexanesulfonic acid | 0.60 ng/L | J DL |
| PWS1165-OS-042521-100 | Perfluorobutanesulfonic acid | 0.83 ng/L | J DL |
| PWS1165-OS-042521-100 | Perfluorooctane sulfonamide | 1.6 ng/L | J DL |
| PWS1175-OS-042421-100 | Perfluoropentanesulfonic acid | 0.43 ng/L | J DL |
| PWS1175-OS-042421-100 | Perfluorooctane sulfonamide | 0.88 ng/L | J DL |
| PWS1176-OS-042321-100 | Perfluorooctanesulfonic acid | 5.7 ng/L | J EMPC |
| PWS1176-OS-042321-100 | Perfluoropentanesulfonic acid | 1.0 ng/L | J DL |
| PWS-FD01-042221 | 10:2 Fluorotelomer sulfonic acid | 0.97 ng/L | J DL |
| PWS-FD01-042221 | N-EtFOSE | 7.6 ng/L | J FD |
| PWS-FD01-042221 | Perfluoropentanesulfonic acid | 0.96 ng/L | J DL |
| PWS-FD01-042221 | Perfluoroheptanesulfonic acid | 0.33 ng/L | J DL |
| PWS-FD01-042221 | 8:2 Fluorotelomer sulfonic acid | 0.53 ng/L | J DL |
| PWS-FD01-042221 | Perfluorooctane sulfonamide | 12 ng/L | J FD |
| PWS-FD01-042321 | Perfluoropentanesulfonic acid | 0.73 ng/L | J DL |
| PWS-FD01-042321 | Perfluorohexanoic acid | 1.7 ng/L | J DL |
| PWS-FD01-042321 | Perfluorononanoic acid | 0.50 ng/L | J DL |
| PWS-FD01-042321 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS-FD01-042421 | Perfluoropentanesulfonic acid | 1.6 ng/L | J DL |
| PWS-FD01-042421 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS-FD01-042521 | Perfluorooctanesulfonic acid | 0.79 ng/L | J DL |
| PWS-FD01-042521 | Perfluoropentanesulfonic acid | 0.61 ng/L | J DL |
| PWS-FD01-042521 | Perfluorobutanesulfonic acid | 1.3 ng/L | J DL |
| PWS-FD01-042521 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS-FD02-042221 | Perfluorohexanoic acid | 0.51 ng/L | J DL |
| PWS-FD02-042221 | Perfluorooctanoic acid | 0.83 ng/L | J DL |
| PWS-FD02-042221 | Perfluorohexanesulfonic acid | 1.1 ng/L | J DL |
| PWS-FD02-042221 | Perfluorobutanoic acid | 3.1 ng/L | J DL |
| PWS-FD02-042321 | Perfluorooctanesulfonic acid | 5.6 ng/L | J EMPC |
| PWS-FD02-042321 | Perfluoropentanoic acid | 1.6 ng/L | J DL |
| PWS-FD02-042321 | Perfluoropentanesulfonic acid | 0.71 ng/L | J DL |
| PWS-FD02-042321 | Perfluoroheptanoic acid | 1.8 ng/L | J DL |
| PWS-FD02-042321 | Perfluorooctane sulfonamide | 1.8 ng/L | J DL |
| PWS-FD02-042421 | Perfluorohexanesulfonic acid | 0.56 ng/L | J DL |
| PWS-FD02-042421 | Perfluorobutanesulfonic acid | 0.80 ng/L | J DL |
| PWS-FD02-042521 | Perfluorooctanesulfonic acid | 0.75 ng/L | J EMPC, DL |
| PWS-FD02-042521 | Perfluoropentanesulfonic acid | 0.29 ng/L | J EMPC, DL |
| PWS-FD02-042521 | Perfluorohexanesulfonic acid | 0.72 ng/L | J DL |
| PWS-FD02-042521 | Perfluorobutanesulfonic acid | 0.68 ng/L | J DL |
| PWS-FD02-042521 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|

**Notes:**
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol
ng/L = nanograms per liter

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
UJ = The analyte was not detected and the reported result is an estimated value.

**Reason Codes:**
DL = The detected concentrations is less than the reporting limit.
EMPC = Transition ion ratios were outside of expected limits.
FD = Imprecision between primary and field duplicate results.

# PFAS Data Validation Checklist

| Laboratory Reports: J72788-1/72788-2 | Yes | No | NA |
|---|---|---|---|
| **I Sample Handling:** | | | |
| 1. Were samples received by the laboratory in containers with PTFE components? | | X | |
| **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. Were tissue samples in a frozen state when received by the laboratory? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. Were solid and/or aqueous field samples extracted within 28 days from collection? | X | | |
| b. Were tissue samples extracted within 1 year from collection? | | | X |
| c. Were extracts analyzed within 30 days from extraction? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II Field Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated equipment and/or field blanks? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | X | | |
| b. Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | | X[1] | |
| c. Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III Laboratory Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated laboratory blank? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. Solid and Aqueous Samples: | | | |
| i 50 to 150% for low-level spikes | | | X |
| ii 60 to 135% for mid- or high-level spikes | X | | |
| b. Tissue Samples: | | | |
| i 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii 60 to 135% for all other PFAS | | | X |
| **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| **If No and recovery is high**: J qualify detected results (J-HL) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J72788-1/72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | | X[2,3,4] | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | X | | |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | X | | |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J72788-1/72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| | a. 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| | b. 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

$X^1$ The RPD between perfluoroheptanesulfonic acid (PFHpS) results from sample PWS1145-OS-042121-100 and its field duplicate PWS-FD02-042121 was high at 62%. Wood J qualified the detected PFHpS results from these samples because of potential sampling and/or analytical imprecision.

$X^2$ Recoveries of the labeled internal standard $^{13}C_2$ 10:2 fluorotelomer sulfonic acid (10:2 FTS) were high in samples PWS-FD01-041921 (180%), PWS1004-OS-041921-100 (153%), PWS1170-OS-042919-100 (167%), and PWS1003-IS-042021-100 (179%). Wood UJ qualified the non-detected 10:2 FTS results from the affected samples because of the high labeled internal standard recoveries.

$X^3$ Recovery of the labeled internal standard M2-8:2 fluorotelomer sulfonic acid (8:2 FTS) was high at 167% in sample PWS1169-OS-041921-100 (167%). Wood UJ qualified the non-detected 8:2 FTS result from this sample because of the high labeled internal standard recovery.

$X^4$ Recoveries of the labeled internal standards M2-8:2 FTS and $^{13}C_2$ 10:2 FTS were high at 208% and 184%, respectively, in sample PWS1020-OS-042021-100. Wood UJ qualified the non-detected 8:2 FTS and 10:2 FTS results from this sample because of the high labeled internal standard recoveries.

**Table 1**
**Field Samples Submitted to Eurofins Environment Testing America**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1008-OS-041921-100 | 04/19/21 11:16 | 320-72788-1 | |
| PWS-FD01-041921 | 04/19/21 12:01 | 320-72788-3 | Field duplicate of PWS1008-OS-041921-100 |
| PWS1009-OS-041921-100 | 04/19/21 13:30 | 320-72788-4 | |
| PWS1011-OS-041921-100 | 04/19/21 14:31 | 320-72788-6 | |
| PWS1014-OS-041921-100 | 04/19/21 16:03 | 320-72788-8 | |
| PWS1002-OS-041921-100 | 04/19/21 16:43 | 320-72788-10 | |
| PWS1004-OS-041921-100 | 04/19/21 17:23 | 320-72788-12 | MS/MSD |
| PWS1004-OS-041921-200 | 04/19/21 16:58 | 320-72788-13 | Field blank |
| PWS1015-OS-041921-100 | 04/19/21 18:25 | 320-72788-14 | |
| PWS1018-OS-041921-100 | 04/19/21 19:05 | 320-72788-16 | |
| PWS1018-OS-041921-200 | 04/19/21 18:44 | 320-72788-17 | Field blank |
| PWS1190-OS-041921-100 | 04/19/21 10:50 | 320-72788-18 | |
| PWS1188-IS-041921-100 | 04/19/21 12:15 | 320-72788-20 | |
| PWS1181-OS-041921-100 | 04/19/21 14:40 | 320-72788-22 | |
| PWS1172-OS-041921-100 | 04/19/21 16:55 | 320-72788-24 | |
| PWS1170-OS-041921-100 | 04/19/21 18:10 | 320-72788-26 | |
| PWS1169-OS-041921-100 | 04/19/21 18:55 | 320-72788-28 | |
| PWS1003-IS-042021-100 | 04/20/21 9:56 | 320-72788-30 | |
| PWS1017-OS-042021-100 | 04/20/21 10:42 | 320-72788-32 | |
| PWS1020-OS-042021-100 | 04/20/21 11:35 | 320-72788-34 | |
| PWS-FD01-042021 | 04/20/21 12:01 | 320-72788-36 | Field duplicate of PWS1020-OS-042021-100 |
| PWS1024-OS-042021-100 | 04/20/21 13:02 | 320-72788-37 | |
| PWS1024-OS-042021-200 | 04/20/21 12:24 | 320-72788-38 | Field blank |
| PWS1027-OS-042021-100 | 04/20/21 13:32 | 320-72788-39 | |
| PWS1027-OS-042021-200 | 04/20/21 13:13 | 320-72788-40 | Field blank |
| PWS1021-OS-042021-100 | 04/20/21 14:36 | 320-72788-41 | |
| PWS1021-OS-042021-200 | 04/20/21 14:03 | 320-72788-42 | Field blank |
| PWS1022-OS-042021-100 | 04/20/21 15:15 | 320-72788-43 | |
| PWS1025-OS-042021-100 | 04/20/21 16:18 | 320-72788-45 | |
| PWS1026-OS-042021-100 | 04/20/21 16:54 | 320-72788-47 | |
| PWS1028-OS-042021-100 | 04/20/21 17:42 | 320-72788-49 | |
| PWS1006-OS-042021-100 | 04/20/21 18:24 | 320-72788-51 | |
| PWS-FD02-042021 | 04/20/21 12:02 | 320-72788-53 | Field duplicate of PWS1168-OS-042021-100<br>Logged in as PWS-FD02-042012 |
| PWS1168-OS-042021-100 | 04/20/21 9:10 | 320-72788-54 | |
| PWS1179-OS-042021-100 | 04/20/21 10:30 | 320-72788-56 | MS/MSD |
| PWS1163-OS-042021-100 | 04/20/21 11:35 | 320-72788-58 | |
| PWS1183-OS-042021-100 | 04/20/21 13:55 | 320-72788-60 | |
| PWS1183-OS-042021-200 | 04/20/21 14:00 | 320-72788-61 | Field blank |
| PWS-FD01-042121 | 04/21/21 12:01 | 320-72788-62 | Field duplicate ofPWS1038-OS-042121-100 |
| PWS1031-OS-042121-100 | 04/21/21 11:02 | 320-72788-63 | |
| PWS1032-OS-042121-100 | 04/21/21 12:02 | 320-72788-65 | MS/MSD |
| PWS1038-OS-042121-100 | 04/21/21 13:30 | 320-72788-67 | |
| PWS1043-OS-042121-100 | 04/21/21 14:10 | 320-72788-69 | |

**Table 1**

**Field Samples Submitted to Eurofins Environment Testing America**

| | | | |
|---|---|---|---|
| PWS1035-OS-042121-100 | 04/21/21 15:06 | 320-72788-71 | |
| PWS1040-OS-042121-100 | 04/21/21 16:07 | 320-72788-73 | |
| PWS1033-OS-042121-100 | 04/21/21 17:10 | 320-72788-75 | |
| PWS1007-OS-042121-100 | 04/21/21 18:30 | 320-72788-77 | |
| PWS1184-OS-042121-100 | 04/21/21 8:25 | 320-72788-79 | |
| PWS1184-OS-042121-200 | 04/21/21 8:30 | 320-72788-80 | Field blank |
| PWS1153-OS-042121-100 | 04/21/21 9:10 | 320-72788-81 | |
| PWS1145-OS-042121-100 | 04/21/21 10:30 | 320-72788-83 | |
| PWS1145-OS-042121-200 | 04/21/21 10:35 | 320-72788-84 | Field blank |
| PWS-FD02-042121 | 04/21/21 12:02 | 320-72788-85 | Field duplicate of PWS1145-OS-042121-100 |
| PWS1157-OS-042121-100 | 04/21/21 14:00 | 320-72788-86 | |
| PWS1124-OS-042121-100 | 04/21/21 16:20 | 320-72788-88 | |

**Note:**

MS/MSD = matrix spike/matrix spike duplicate

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1008-OS-041921-100 and PWS-FD01-041921 | | | | | |
| PFBA | 4.4 ng/L | 17 | 18 | 5.7% | |
| PFOA | 1.7 ng/L | 3.2 | 3.1 | 3.2% | |
| PFNA | 1.7 ng/L | 0.55 J | 0.44 J | 22% | |
| PFBS | 1.7 ng/L | 5.0 | 5.7 | 13% | |
| PFPeS | 1.7 ng/L | 0.47 J | 0.57 J | 19% | |
| PFHxS | 1.7 ng/L | 1.8 | 2.1 | 15% | |
| PFOS | 1.7 ng/L | 10 | 11 | 9.5% | |
| FOSA | 1.7 ng/L | 0.95 J | 1.4 J | 38% | < 2RL |
| Samples PWS1020-OS-042021-100 and PWS-FD01-042021 | | | | | |
| PFBA | 4.4 ng/L | 7.6 | 7.5 | 1.3% | |
| PFBS | 1.8 ng/L | 13 | 15 | 14% | |
| PFPeS | 1.8 ng/L | 0.26 J | 0.28 J | 7.4% | |
| PFHxS | 1.8 ng/L | 1.0 J | 1.1 J | 9.5% | |
| PFOS | 1.8 ng/L | 4.8 | 5.2 | 8.0% | |
| Samples PWS1168-OS-042021-100 and PWS-FD02-042021 | | | | | |
| PFBA | 4.8 ng/L | 4.7 | 4.8 J | 2.1% | |
| PFPeA | 2.0 ng/L | 2.8 | 2.7 | 3.6% | |
| PFHxA | 2.0 ng/L | 2.3 | 2.1 | 9.1% | |
| PFHpA | 2.0 ng/L | 1.7 J | 1.6 J | 6.1% | |
| PFOA | 2.0 ng/L | 2.2 | 2.3 | 4.4% | |
| PFBS | 2.0 ng/L | 0.99 J | 0.90 J | 10% | |
| PFPeS | 2.0 ng/L | 0.66 J | 0.81 J | 20% | |
| PFHxS | 2.0 ng/L | 1.7 J | 1.6 J | 6.1% | |
| PFOS | 2.0 ng/L | 0.87 J | 2.0 U | NC | ± RL |
| Samples PWS1038-OS-042121-100 and PWS-FD01-042121 | | | | | |
| PFBA | 4.8 ng/L | 7.8 | 7.7 | 1.3% | |
| PFNA | 1.9 ng/L | 0.46 J | 0.41 J | 11% | |
| PFDA | 1.9 ng/L | 1.9 U | 0.55 J | NC | ± RL |
| PFBS | 1.9 ng/L | 2.4 | 2.4 | 0.0% | |
| PFPeS | 1.9 ng/L | 1.9 U | 0.31 J | NC | ± RL |
| PFHxS | 1.9 ng/L | 1.2 J | 0.95 J | 23% | |
| PFOS | 1.9 ng/L | 4.2 | 3.8 | 10% | |

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1145-OS-042121-100 and PWS-FD02-042121 | | | | | |
| PFBA | 4.7 ng/L | 6.5 | 6.1 | 6.3% | |
| PFPeA | 1.9 ng/L | 1.4 J | 1.6 J | 13% | |
| PFHxA | 1.9 ng/L | 1.8 J | 2.0 | 11% | |
| PFHpA | 1.9 ng/L | 1.6 J | 1.9 J | 17% | |
| PFOA | 1.9 ng/L | 8.9 | 8.4 | 5.8% | |
| PFBS | 1.9 ng/L | 2.2 | 2.2 | 0.0% | |
| PFPeS | 1.9 ng/L | 0.80 J | 0.61 J | 27% | |
| PFHxS | 1.9 ng/L | 10 | 10 | 0.0% | |
| PFHpS | 1.9 ng/L | 0.27 J | 0.51 J | 62% | J-FD |
| PFOS | 1.9 ng/L | 13 | 14 | 7.4% | |
| FOSA | 1.9 ng/L | 1.9 U | 3.7 | NC | ± RL |

**Notes:**

FOSA = perfluorooctanesulfonamide

NC = not calculable

ng/L = nanograms per liter

PFBA = perfluorobutanoic acid

PFBS = perfluorobutanesulfonic acid

PFDA = perfluorodecanoic acid

PFHpA = perfluoroheptanoic acid

PFHpS = perfluoroheptanesulfonic acid

PFHxA = perfluorohexanoic acid

PFHxS = perfluorohexanesulfonic acid

PFNA = perfluorononanoic acid

PFOA = perfluorooctanoic acid

PFOS = perfluorooctanesulfonic acid

PFPeA = perfluoropentanoic acid

PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**

J = The reported result was an estimated value with an unknown bias.

U = The analyte was not detected.

**Reason Codes:**

FD = Imprecision between primary and field duplicate results.

< 2RL = The detected concentrations are less than twice the RL and the relative percent difference between results is less than 50%, indicating acceptable sampling and analytical precision.

± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1002-OS-041921-100 | Perfluorooctanesulfonic acid | 0.97 ng/L | J DL |
| PWS1002-OS-041921-100 | Perfluorobutanoic acid | 2.2 ng/L | J DL |
| PWS1002-OS-041921-100 | Perfluorobutanesulfonic acid | 0.81 ng/L | J DL |
| PWS1003-IS-042021-100 | 10:2 Fluorotelomer sulfonic acid | 1.8 ng/L | UJ HI |
| PWS1003-IS-042021-100 | Perfluoropentanesulfonic acid | 1.2 ng/L | J DL |
| PWS1004-OS-041921-100 | 10:2 Fluorotelomer sulfonic acid | 1.6 ng/L | UJ HI |
| PWS1004-OS-041921-100 | Perfluoropentanoic acid | 1.2 ng/L | J DL |
| PWS1004-OS-041921-100 | Perfluoropentanesulfonic acid | 0.38 ng/L | J DL |
| PWS1004-OS-041921-100 | Perfluorohexanoic acid | 1.5 ng/L | J DL |
| PWS1004-OS-041921-100 | Perfluoroheptanoic acid | 1.2 ng/L | J DL |
| PWS1004-OS-041921-100 | Perfluoroheptanesulfonic acid | 0.38 ng/L | J DL |
| PWS1004-OS-041921-100 | Perfluorononanoic acid | 0.69 ng/L | J DL |
| PWS1006-OS-042021-100 | Perfluoropentanesulfonic acid | 0.55 ng/L | J DL |
| PWS1006-OS-042021-100 | Perfluorooctanoic acid | 1.3 ng/L | J DL |
| PWS1006-OS-042021-100 | Perfluorononanoic acid | 0.72 ng/L | J DL |
| PWS1007-OS-042121-100 | Perfluoropentanesulfonic acid | 0.39 ng/L | J DL |
| PWS1007-OS-042121-100 | Perfluorooctanoic acid | 1.8 ng/L | J DL |
| PWS1007-OS-042121-100 | Perfluorohexanesulfonic acid | 1.4 ng/L | J DL |
| PWS1007-OS-042121-100 | Perfluorononanoic acid | 0.84 ng/L | J DL |
| PWS1008-OS-041921-100 | Perfluoropentanesulfonic acid | 0.47 ng/L | J DL |
| PWS1008-OS-041921-100 | Perfluorononanoic acid | 0.55 ng/L | J DL |
| PWS1008-OS-041921-100 | Perfluorooctane sulfonamide | 0.95 ng/L | J DL |
| PWS1009-OS-041921-100 | Perfluoropentanesulfonic acid | 0.44 ng/L | J DL |
| PWS1009-OS-041921-100 | Perfluorohexanesulfonic acid | 1.5 ng/L | J DL |
| PWS1009-OS-041921-100 | Perfluorononanoic acid | 0.34 ng/L | J DL |
| PWS1009-OS-041921-100 | Perfluorooctane sulfonamide | 0.84 ng/L | J DL |
| PWS1011-OS-041921-100 | Perfluorohexanesulfonic acid | 0.63 ng/L | J DL |
| PWS1011-OS-041921-100 | Perfluorobutanoic acid | 4.1 ng/L | J DL |
| PWS1014-OS-041921-100 | Perfluoropentanesulfonic acid | 0.64 ng/L | J DL |
| PWS1014-OS-041921-100 | Perfluorohexanoic acid | 0.56 ng/L | J DL |
| PWS1014-OS-041921-100 | Perfluorononanoic acid | 0.73 ng/L | J DL |
| PWS1014-OS-041921-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1015-OS-041921-100 | Perfluoropentanesulfonic acid | 0.51 ng/L | J DL |
| PWS1015-OS-041921-100 | Perfluorodecanoic acid | 0.57 ng/L | J EMPC, DL |
| PWS1015-OS-041921-100 | Perfluoroheptanesulfonic acid | 0.22 ng/L | J DL |
| PWS1017-OS-042021-100 | Perfluoropentanoic acid | 1.1 ng/L | J DL |
| PWS1017-OS-042021-100 | Perfluoropentanesulfonic acid | 0.43 ng/L | J DL |
| PWS1017-OS-042021-100 | Perfluorohexanoic acid | 1.2 ng/L | J DL |
| PWS1017-OS-042021-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J DL |
| PWS1017-OS-042021-100 | Perfluorononanoic acid | 0.56 ng/L | J DL |
| PWS1018-OS-041921-100 | Perfluoropentanesulfonic acid | 0.58 ng/L | J DL |
| PWS1018-OS-041921-100 | Perfluoroheptanoic acid | 1.5 ng/L | J DL |
| PWS1018-OS-041921-100 | Perfluoroheptanesulfonic acid | 0.23 ng/L | J DL |
| PWS1020-OS-042021-100 | Perfluoropentanesulfonic acid | 0.26 ng/L | J DL |
| PWS1020-OS-042021-100 | 10:2 Fluorotelomer sulfonic acid | 1.7 ng/L | UJ HI |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1020-OS-042021-100 | 8:2 Fluorotelomer sulfonic acid | 1.7 ng/L | UJ HI |
| PWS1020-OS-042021-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1021-OS-042021-100 | Perfluoropentanesulfonic acid | 0.51 ng/L | J DL |
| PWS1021-OS-042021-100 | Perfluorohexanoic acid | 0.83 ng/L | J DL |
| PWS1022-OS-042021-100 | Perfluoropentanesulfonic acid | 0.36 ng/L | J DL |
| PWS1022-OS-042021-100 | Perfluorononanoic acid | 0.55 ng/L | J DL |
| PWS1024-OS-042021-100 | Perfluoropentanesulfonic acid | 0.85 ng/L | J DL |
| PWS1024-OS-042021-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL |
| PWS1025-OS-042021-100 | Perfluoropentanoic acid | 1.4 ng/L | J DL |
| PWS1025-OS-042021-100 | Perfluoropentanesulfonic acid | 0.59 ng/L | J DL |
| PWS1025-OS-042021-100 | Perfluorohexanoic acid | 0.67 ng/L | J DL |
| PWS1026-OS-042021-100 | Perfluoropentanesulfonic acid | 0.47 ng/L | J DL |
| PWS1026-OS-042021-100 | Perfluorooctanoic acid | 1.6 ng/L | J DL |
| PWS1026-OS-042021-100 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS1027-OS-042021-100 | Perfluoropentanesulfonic acid | 0.67 ng/L | J DL |
| PWS1027-OS-042021-100 | Perfluorohexanoic acid | 3.4 ng/L | J EMPC |
| PWS1027-OS-042021-100 | Perfluoroheptanoic acid | 1.2 ng/L | J DL |
| PWS1028-OS-042021-100 | Perfluorobutanoic acid | 2.4 ng/L | J DL |
| PWS1028-OS-042021-100 | Perfluorobutanesulfonic acid | 0.73 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluoropentanoic acid | 0.77 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluoropentanesulfonic acid | 0.63 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluorohexanoic acid | 0.54 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluorooctanoic acid | 1.3 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluorodecanoic acid | 0.52 ng/L | J DL |
| PWS1031-OS-042121-100 | Perfluorononanoic acid | 0.33 ng/L | J DL |
| PWS1032-OS-042121-100 | Perfluorobutanesulfonic acid | 1.3 ng/L | J DL |
| PWS1032-OS-042121-100 | Perfluorononanoic acid | 0.41 ng/L | J DL |
| PWS1033-OS-042121-100 | Perfluoropentanesulfonic acid | 0.31 ng/L | J DL |
| PWS1033-OS-042121-100 | Perfluorodecanoic acid | 0.36 ng/L | J DL |
| PWS1033-OS-042121-100 | Perfluorononanoic acid | 0.40 ng/L | J DL |
| PWS1035-OS-042121-100 | Perfluorooctanesulfonic acid | 1.5 ng/L | J DL |
| PWS1035-OS-042121-100 | Perfluorodecanoic acid | 0.46 ng/L | J DL |
| PWS1035-OS-042121-100 | Perfluorobutanoic acid | 3.5 ng/L | J DL |
| PWS1035-OS-042121-100 | Perfluorobutanesulfonic acid | 1.4 ng/L | J DL |
| PWS1035-OS-042121-100 | Perfluorononanoic acid | 0.34 ng/L | J DL |
| PWS1038-OS-042121-100 | Perfluorohexanesulfonic acid | 1.2 ng/L | J DL |
| PWS1038-OS-042121-100 | Perfluorononanoic acid | 0.46 ng/L | J DL |
| PWS1040-OS-042121-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1040-OS-042121-100 | Perfluorononanoic acid | 0.41 ng/L | J EMPC, DL |
| PWS1043-OS-042121-100 | Perfluorohexanesulfonic acid | 1.2 ng/L | J DL |
| PWS1043-OS-042121-100 | Perfluorononanoic acid | 0.47 ng/L | J DL |
| PWS1124-OS-042121-100 | Perfluorooctanesulfonic acid | 1.4 ng/L | J EMPC, DL |
| PWS1124-OS-042121-100 | Perfluorohexanoic acid | 0.60 ng/L | J DL |
| PWS1124-OS-042121-100 | Perfluorooctanoic acid | 0.98 ng/L | J DL |
| PWS1124-OS-042121-100 | Perfluorohexanesulfonic acid | 0.79 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1124-OS-042121-100 | Perfluorobutanesulfonic acid | 0.72 ng/L | J DL |
| PWS1145-OS-042121-100 | Perfluoropentanoic acid | 1.4 ng/L | J DL |
| PWS1145-OS-042121-100 | Perfluoropentanesulfonic acid | 0.80 ng/L | J DL |
| PWS1145-OS-042121-100 | Perfluorohexanoic acid | 1.8 ng/L | J DL |
| PWS1145-OS-042121-100 | Perfluoroheptanoic acid | 1.6 ng/L | J DL |
| PWS1145-OS-042121-100 | Perfluoroheptanesulfonic acid | 0.27 ng/L | J FD, EMPC, DL |
| PWS1153-OS-042121-100 | Perfluorooctanesulfonic acid | 1.1 ng/L | J DL |
| PWS1153-OS-042121-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1153-OS-042121-100 | Perfluorobutanesulfonic acid | 1.8 ng/L | J DL |
| PWS1157-OS-042121-100 | Perfluoropentanesulfonic acid | 0.40 ng/L | J DL |
| PWS1157-OS-042121-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J DL |
| PWS1157-OS-042121-100 | Perfluoroheptanoic acid | 0.93 ng/L | J DL |
| PWS1157-OS-042121-100 | Perfluoroheptanesulfonic acid | 0.29 ng/L | J DL |
| PWS1163-OS-042021-100 | Perfluoropentanoic acid | 0.60 ng/L | J DL |
| PWS1163-OS-042021-100 | Perfluorohexanoic acid | 0.52 ng/L | J DL |
| PWS1163-OS-042021-100 | Perfluorobutanoic acid | 2.1 ng/L | J DL |
| PWS1168-OS-042021-100 | Perfluorooctanesulfonic acid | 0.87 ng/L | J DL |
| PWS1168-OS-042021-100 | Perfluoropentanesulfonic acid | 0.66 ng/L | J DL |
| PWS1168-OS-042021-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J DL |
| PWS1168-OS-042021-100 | Perfluorobutanesulfonic acid | 0.99 ng/L | J DL |
| PWS1168-OS-042021-100 | Perfluoroheptanoic acid | 1.7 ng/L | J DL |
| PWS1169-OS-041921-100 | 8:2 Fluorotelomer sulfonic acid | 1.7 ng/L | UJ HI |
| PWS1170-OS-041921-100 | 10:2 Fluorotelomer sulfonic acid | 1.9 ng/L | UJ HI |
| PWS1172-OS-041921-100 | Perfluorooctanesulfonic acid | 0.58 ng/L | J DL |
| PWS1172-OS-041921-100 | Perfluorohexanesulfonic acid | 1.4 ng/L | J DL |
| PWS1172-OS-041921-100 | Perfluorobutanoic acid | 2.8 ng/L | J DL |
| PWS1179-OS-042021-100 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS1179-OS-042021-100 | Perfluorohexanoic acid | 1.4 ng/L | J DL |
| PWS1179-OS-042021-100 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS1179-OS-042021-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1179-OS-042021-100 | Perfluorobutanesulfonic acid | 0.82 ng/L | J DL |
| PWS1183-OS-042021-100 | Perfluorooctanesulfonic acid | 3.7 ng/L | J EMPC |
| PWS1183-OS-042021-100 | Perfluoropentanesulfonic acid | 0.52 ng/L | J DL |
| PWS1183-OS-042021-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J DL |
| PWS1183-OS-042021-100 | Perfluoroheptanesulfonic acid | 0.19 ng/L | J DL |
| PWS1184-OS-042121-100 | Perfluoropentanoic acid | 0.82 ng/L | J DL |
| PWS1184-OS-042121-100 | Perfluoropentanesulfonic acid | 1.5 ng/L | J DL |
| PWS1184-OS-042121-100 | Perfluoroheptanoic acid | 0.46 ng/L | J DL |
| PWS1188-IS-041921-100 | Perfluoropentanesulfonic acid | 0.73 ng/L | J DL |
| PWS1190-OS-041921-100 | Perfluoropentanesulfonic acid | 0.40 ng/L | J DL |
| PWS1190-OS-041921-100 | Perfluorohexanesulfonic acid | 0.68 ng/L | J DL |
| PWS1190-OS-041921-100 | Perfluorobutanesulfonic acid | 0.86 ng/L | J DL |
| PWS-FD01-041921 | Perfluoropentanesulfonic acid | 0.57 ng/L | J EMPC, DL |
| PWS-FD01-041921 | Perfluorononanoic acid | 0.44 ng/L | J DL |
| PWS-FD01-041921 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS-FD01-042021 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS-FD01-042021 | Perfluorohexanesulfonic acid | 1.1 ng/L | J DL |
| PWS-FD01-042121 | 10:2 Fluorotelomer sulfonic acid | 1.8 ng/L | UJ HI |
| PWS-FD01-042121 | Perfluoropentanesulfonic acid | 0.31 ng/L | J DL |
| PWS-FD01-042121 | Perfluorodecanoic acid | 0.55 ng/L | J DL |
| PWS-FD01-042121 | Perfluorohexanesulfonic acid | 0.95 ng/L | J DL |
| PWS-FD01-042121 | Perfluorononanoic acid | 0.41 ng/L | J DL |
| PWS-FD02-042021 | Perfluoropentanesulfonic acid | 0.81 ng/L | J DL |
| PWS-FD02-042021 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS-FD02-042021 | Perfluorobutanoic acid | 4.8 ng/L | J DL |
| PWS-FD02-042021 | Perfluorobutanesulfonic acid | 0.90 ng/L | J DL |
| PWS-FD02-042021 | Perfluoroheptanoic acid | 1.6 ng/L | J DL |
| PWS-FD02-042121 | Perfluoropentanoic acid | 1.6 ng/L | J DL |
| PWS-FD02-042121 | Perfluoropentanesulfonic acid | 0.61 ng/L | J DL |
| PWS-FD02-042121 | Perfluoroheptanesulfonic acid | 0.51 ng/L | J FD, DL |

**Note:**
ng/L = nanograms per liter

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
UJ = The analyte was not detected and the reported result is an estimated concentration.

**Reason Codes:**
DL = The detected concentrations is less than the reporting limit.
EMPC = Transition ion ratios were outside of expected limits.
FD = Imprecision between primary and field duplicate results.
HI = High internal standard recovery. Result may be biased low.

# PFAS Data Validation Checklist

| Laboratory Reports: J73077-1/J72788-2 | Yes | No | NA |
|---|---|---|---|
| **I Sample Handling:** | | | |
| 1. Were samples received by the laboratory in containers with PTFE components? | | X | |
| **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. Were tissue samples in a frozen state when received by the laboratory? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. Were solid and/or aqueous field samples extracted within 28 days from collection? | X | | |
| b. Were tissue samples extracted within 1 year from collection? | | | X |
| c. Were extracts analyzed within 30 days from extraction? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II Field Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated equipment and/or field blanks? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | X | | |
| b. Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | | X[1] | |
| c. Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III Laboratory Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated laboratory blank? | X[2,3] | | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. Solid and Aqueous Samples: | | | |
| i 50 to 150% for low-level spikes | | | X |
| ii 60 to 135% for mid- or high-level spikes | X | | |
| b. Tissue Samples: | | | |
| i 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii 60 to 135% for all other PFAS | | | X |
| **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| **If No and recovery is high**: J qualify detected results (J-HL) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J73077-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | X | | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | X | | |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | X | | |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J73077-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| a. | 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| b. | 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

X[1] The RPD between perfluoroheptanoic acid (PFHpA) results from sample PWS1129-OS-042821-100 and its field duplicate PWS-FD01-042821 was high at 60%. Wood J qualified the detected PFHpA results from these samples because of potential sampling and/or analytical imprecision.

X[2] Perfluorooctanesulfonic acid (PFOS) was detected in the laboratory blank associated with the extraction of samples PWS1132-OS-042621-100, PWS1105-OS-042621-100, PWS-FD02-042621, PWS1182-OS-042621-100, PWS1200-OS-042621-100, PWS1104-OS-042621-100, PWS1167-OS-042621-100, PWS1097-OS-042621-100, PWS1005-OS-042721-100, PWS-FD01-042721, and PWS1080-IS-042721-100 at a concentration of 0.589 nanograms per liter (ng/L).

- Wood U qualified the detected PFOS results from samples PWS1167-OS-0426211-100, PWS1080-IS-042721-100, and PWS1097-OS-042621-100 at the reporting limits of 1.9 mg/L, 1.8 ng/L, and 1.8 ng/L, respectively, because the concentrations detected in the samples were less than 10 times the concentration detected in the blank.
- PFOS either was not detected in the remaining associated samples or the detected concentrations were greater than 10 times concentration detected in the blank and data usability is not adversely affected by the blank detection.

| Laboratory Reports: J73077-1/J72788-2 | Yes | No | NA |
|---|---|---|---|

X[3] FOSA and N-EtFOSE were detected at concentrations of 2.62 ng/L and 1.42 ng/L, respectively in the laboratory blank associated with the extraction of samples PWS1096-OS-042721-100, PWS1090-OS-042721-100, PWS1098-OS-042721-100, PWS1093-OS-042721-100, PWS1094-OS-042721-100, PWS1129-OS-042821-100, PWS-FD01-042821, PWS1115-OS-042821-100, PWS1001-OS-042821-100, PWS1082-OS-042821-100, PWS1141-OS-042821-100, PWS1050-OS-042821-100, PWS1095-IS-042821-100, and PWS1111-OS-042821-100. FOSA and N-EtFOSE were not detected in the associated samples and data usability is not adversely affected by the blank detections.

**Table 1**
**Field Samples Submitted to Eurofins Environment Testing America**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1132-OS-042621-100 | 4/26/2021 9:45 | 320-73077-1 | MS/MSD |
| PWS1132-OS-042621-200 | 4/26/2021 9:50 | 320-73077-2 | Field Blank |
| PWS1105-OS-042621-100 | 4/26/2021 10:40 | 320-73077-3 | |
| PWS1105-OS-042621-200 | 4/26/2021 10:45 | 320-73077-4 | Field Blank |
| PWS-FD02-042621 | 4/26/2021 12:02 | 320-73077-5 | Field duplicate of PWS1105-OS-042621-100 |
| PWS1182-OS-042621-100 | 4/26/2021 12:05 | 320-73077-6 | |
| PWS1200-OS-042621-100 | 4/26/2021 13:00 | 320-73077-8 | |
| PWS1104-OS-042621-100 | 4/26/2021 14:30 | 320-73077-10 | |
| PWS1167-OS-042621-100 | 4/26/2021 15:55 | 320-73077-12 | |
| PWS1097-OS-042621-100 | 4/26/2021 17:45 | 320-73077-14 | |
| PWS1005-OS-042721-100 | 4/27/2021 8:33 | 320-73077-16 | |
| PWS-FD01-042721 | 4/27/2021 12:01 | 320-73077-18 | Field duplicate of PWS1005-OS-042721-100 |
| PWS1080-IS-042721-100 | 4/27/2021 9:31 | 320-73077-19 | |
| PWS1052-OS-042721-100 | 4/27/2021 15:21 | 320-73077-21 | MS/MSD |
| PWS1052-OS-042721-200 | 4/27/2021 15:06 | 320-73077-22 | Field Blank |
| PWS1042-OS-042721-100 | 4/27/2021 16:28 | 320-73077-23 | |
| PWS1042-OS-042721-200 | 4/27/2021 16:10 | 320-73077-24 | Field Blank |
| PWS1071-IS-042721-100 | 4/27/2021 17:13 | 320-73077-25 | |
| PWS1010-IS-042721-100 | 4/27/2021 18:26 | 320-73077-27 | |
| PWS1066-OS-042721-100 | 4/27/2021 19:07 | 320-73077-29 | |
| PWS1066-OS-042721-200 | 4/27/2021 18:50 | 320-73077-30 | Field Blank |
| PWS1091-OS-042721-100 | 4/27/2021 9:30 | 320-73077-31 | |
| PWS-FD02-042721 | 4/27/2021 12:02 | 320-73077-33 | Field duplicate of PWS1091-OS-042721-100 |
| PWS1187-OS-042721-100 | 4/27/2021 10:20 | 320-73077-34 | |
| PWS1086-OS-042721-100 | 4/27/2021 11:05 | 320-73077-36 | |
| PWS1099-OS-042721-100 | 4/27/2021 11:45 | 320-73077-38 | |
| PWS1096-OS-042721-100 | 4/27/2021 12:30 | 320-73077-40 | |
| PWS1090-OS-042721-100 | 4/27/2021 13:50 | 320-73077-42 | |
| PWS1098-OS-042721-100 | 4/27/2021 14:45 | 320-73077-44 | |
| PWS1093-OS-042721-100 | 4/27/2021 15:50 | 320-73077-46 | |
| PWS1094-OS-042721-100 | 4/27/2021 17:00 | 320-73077-48 | |
| PWS1121-OS-042721-100 | 4/27/2021 18:00 | 320-73077-50 | |
| PWS1121-OS-042721-200 | 4/27/2021 18:05 | 320-73077-51 | Field Blank |
| PWS1129-OS-042821-100 | 4/28/2021 8:32 | 320-73077-52 | |
| PWS-FD01-042821 | 4/28/2021 12:01 | 320-73077-54 | Field duplicate of PWS1129-OS-042821-100 |
| PWS1115-OS-042821-100 | 4/28/2021 9:28 | 320-73077-55 | |
| PWS1001-OS-042821-100 | 4/28/2021 10:11 | 320-73077-57 | |
| PWS1082-OS-042821-100 | 4/28/2021 12:27 | 320-73077-59 | |
| PWS1141-OS-042821-100 | 4/28/2021 14:23 | 320-73077-61 | |
| PWS1141-OS-042821-200 | 4/28/2021 13:54 | 320-73077-62 | Field Blank |
| PWS1050-OS-042821-200 | 4/28/2021 14:49 | 320-73077-64 | Field Blank |
| PWS1050-OS-042821-100 | 4/28/2021 15:10 | 320-73077-63 | |
| PWS1095-IS-042821-100 | 4/28/2021 16:03 | 320-73077-65 | |
| PWS1111-OS-042821-100 | 4/28/2021 17:04 | 320-73077-67 | |

**Table 1**

**Field Samples Submitted to Eurofins Environment Testing America**

| | | | |
|---|---|---|---|
| PWS1085-OS-042821-100 | 4/28/2021 8:45 | 320-73077-69 | MS/MSD |
| PWS1118-OS-042821-100 | 4/28/2021 9:30 | 320-73077-71 | |
| PWS1118-OS-042821-200 | 4/28/2021 9:35 | 320-73077-72 | Field Blank |
| PWS-FD02-042821 | 4/28/2021 12:02 | 320-73077-73 | Field duplicate of PWS1118-OS-042821-100 |
| PWS1084-OS-042821-100 | 4/28/2021 10:10 | 320-73077-74 | |
| PWS1084-OS-042821-200 | 4/28/2021 10:15 | 320-73077-75 | Field Blank |
| PWS1164-IS-042821-100 | 4/28/2021 11:20 | 320-73077-76 | |
| PWS1199-IS-042821-100 | 4/28/2021 12:10 | 320-73077-78 | |
| PWS1150-OS-042821-100 | 4/28/2021 12:55 | 320-73077-80 | |
| PWS1158-OS-042821-100 | 4/28/2021 14:50 | 320-73077-82 | |
| PWS1177-OS-042821-100 | 4/28/2021 15:35 | 320-73077-84 | |
| PWS1178-OS-042821-100 | 4/28/2021 16:15 | 320-73077-86 | |
| PWS1102-OS-042821-100 | 4/28/2021 17:05 | 320-73077-88 | |
| PWS1186-IS-042821-100 | 4/28/2021 17:45 | 320-73077-90 | |

**Note:**

MS/MSD = matrix spike/matrix spike duplicate

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1105-OS-042621-100 and PWS-FD02-042621 | | | | | |
| FOSA | 1.9 ng/L | 1.5 J | 1.2 J | 22% | |
| Samples PWS1005-OS-042721-100 and PWS-FD01-042721 | | | | | |
| PFBA | 4.7 ng/L | 14 | 15 | 6.9% | |
| PFHxA | 1.9 ng/L | 0.54 J | 0.55 J | 1.8% | |
| PFOA | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFNA | 1.9 ng/L | 0.44 J | 0.42 J | 4.7% | |
| PFDA | 1.9 ng/L | 0.54 J | 0.51 J | 5.7% | |
| PFBS | 1.9 ng/L | 3.9 | 4.2 | 7.4% | |
| PFPeS | 1.9 ng/L | 0.37 J | 0.30 J | 21% | |
| PFHxS | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFOS | 1.9 ng/L | 9.3 | 9.4 | 1.1% | |
| FOSA | 1.9 ng/L | 1.9 U | 0.98 J | NC | ± RL |
| Samples PWS1091-OS-042721-100 and PWS-FD02-042721 | | | | | |
| PFBA | 4.4 ng/L | 4.8 | 4.9 | 2.1% | |
| PFPeA | 1.8 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.8 ng/L | 2.2 | 2.2 | 0.0% | |
| PFHpA | 1.8 ng/L | 1.7 | 1.7 J | 0.0% | |
| PFOA | 1.8 ng/L | 2.8 | 2.6 | 7.4% | |
| PFDA | 1.8 ng/L | 0.30 J | 1.8 U | NC | ± RL |
| PFBS | 1.8 ng/L | 2.6 | 2.6 | 0.0% | |
| PFPeS | 1.8 ng/L | 0.37 J | 0.44 J | 17% | |
| PFHxS | 1.8 ng/L | 2.2 | 2.1 | 4.7% | |
| PFOS | 1.8 ng/L | 1.1 J | 1.1 J | 0.0% | |
| FOSA | 1.8 ng/L | 2.5 | 3.7 | 39% | ± RL |
| Samples PWS1129-OS-042821-100 and PWS-FD01-042821 | | | | | |
| PFBA | 4.7 ng/L | 2.3 J | 2.3 J | 0.0% | |
| PFPeA | 1.9 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.9 ng/L | 1.6 J | 1.8 J | 12% | |
| PFHpA | 1.9 ng/L | 1.1 J | 0.59 J | 60% | J-FD |
| PFOA | 1.9 ng/L | 2.7 | 2.1 | 25% | |
| PFBS | 1.9 ng/L | 1.2 J | 1.2 J | 0.0% | |
| PFHxS | 1.9 ng/L | 0.84 J | 0.77 J | 8.7% | |
| PFOS | 1.9 ng/L | 3.4 | 3.0 | 13% | |
| Samples PWS1118-OS-042821-100 and PWS-FD02-042821 | | | | | |
| PFBA | 4.8 ng/L | 5.7 | 5.9 | 3.4% | |
| PFPeA | 1.9 ng/L | 0.89 J | 0.95 J | 7% | |
| PFHxA | 1.9 ng/L | 1.2 J | 1.4 J | 15% | |
| PFHpA | 1.9 ng/L | 0.68 J | 0.67 J | 1% | |
| PFOA | 1.9 ng/L | 2.2 | 2.2 | 0.0% | |
| PFDA | 1.9 ng/L | 0.37 J | 1.9 U | NC | ± RL |
| PFBS | 1.9 ng/L | 2.2 | 2.0 | 9.5% | |
| PFHxS | 1.9 ng/L | 0.77 J | 0.67 J | 13.9% | |
| PFOS | 1.9 ng/L | 3.9 | 3.8 | 2.6% | |

**Table 2**

**Precision Between Detections in Primary Samples and their Field Duplicates**

**Notes:**

FOSA = perfluorooctanesulfonamide
NC = not calculable
ng/L = nanograms per liter
PFBA = perfluorobutanoic acid
PFBS = perfluorobutanesulfonic acid
PFDA = perfluorodecanoic acid
PFHpA = perfluoroheptanoic acid
PFHpS = perfluoroheptanesulfonic acid
PFHxA = perfluorohexanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanoic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid
PFPeA = perfluoropentanoic acid
PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**

J = The reported result was an estimated value with an unknown bias.
U = The analyte was not detected.

**Reason Codes:**

FD = Imprecision between primary and field duplicate results.
< 2RL = The detected concentrations are less than twice the RL and the relative percent difference between results is less than 50%, indicating acceptable sampling and analytical precision.
± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1001-OS-042821-100 | Perfluorohexanoic acid | 0.99 ng/L | J DL |
| PWS1001-OS-042821-100 | Perfluorohexanesulfonic acid | 0.60 ng/L | J DL |
| PWS1001-OS-042821-100 | Perfluorobutanesulfonic acid | 0.87 ng/L | J DL |
| PWS1005-OS-042721-100 | Perfluoropentanesulfonic acid | 0.37 ng/L | J DL |
| PWS1005-OS-042721-100 | Perfluorohexanoic acid | 0.54 ng/L | J EMPC, DL |
| PWS1005-OS-042721-100 | Perfluorooctanoic acid | 1.6 ng/L | J DL |
| PWS1005-OS-042721-100 | Perfluorodecanoic acid | 0.54 ng/L | J DL |
| PWS1005-OS-042721-100 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS1005-OS-042721-100 | Perfluorononanoic acid | 0.44 ng/L | J DL |
| PWS1010-IS-042721-100 | Perfluorooctanoic acid | 0.84 ng/L | J DL |
| PWS1010-IS-042721-100 | Perfluorodecanoic acid | 0.59 ng/L | J DL |
| PWS1010-IS-042721-100 | Perfluorohexanesulfonic acid | 0.81 ng/L | J DL |
| PWS1010-IS-042721-100 | Perfluorononanoic acid | 0.53 ng/L | J DL |
| PWS1042-OS-042721-100 | Perfluoropentanoic acid | 0.48 ng/L | J DL |
| PWS1042-OS-042721-100 | Perfluoropentanesulfonic acid | 0.92 ng/L | J DL |
| PWS1042-OS-042721-100 | Perfluorohexanoic acid | 1.0 ng/L | J DL |
| PWS1042-OS-042721-100 | Perfluoroheptanoic acid | 0.29 ng/L | J DL |
| PWS1042-OS-042721-100 | Perfluoroheptanesulfonic acid | 0.17 ng/L | J EMPC, DL |
| PWS1042-OS-042721-100 | Perfluorononanoic acid | 0.24 ng/L | J DL |
| PWS1050-OS-042821-100 | Perfluoropentanesulfonic acid | 1.0 ng/L | J DL |
| PWS1050-OS-042821-100 | Perfluoroheptanoic acid | 0.97 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluoropentanoic acid | 0.90 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluoropentanesulfonic acid | 0.81 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluorohexanoic acid | 1.3 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluorodecanoic acid | 0.29 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluoroheptanoic acid | 0.41 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluoroheptanesulfonic acid | 0.24 ng/L | J DL |
| PWS1052-OS-042721-100 | Perfluorononanoic acid | 0.26 ng/L | J DL |
| PWS1066-OS-042721-100 | Perfluorodecanoic acid | 0.29 ng/L | J DL |
| PWS1066-OS-042721-100 | Perfluoroheptanoic acid | 0.56 ng/L | J DL |
| PWS1066-OS-042721-100 | Perfluoroheptanesulfonic acid | 0.33 ng/L | J EMPC, DL |
| PWS1071-IS-042721-100 | Perfluoropentanoic acid | 0.53 ng/L | J DL |
| PWS1071-IS-042721-100 | Perfluorohexanoic acid | 0.83 ng/L | J DL |
| PWS1071-IS-042721-100 | Perfluoroheptanoic acid | 0.75 ng/L | J DL |
| PWS1071-IS-042721-100 | Perfluoroheptanesulfonic acid | 0.27 ng/L | J DL |
| PWS1080-IS-042721-100 | Perfluorooctanesulfonic acid | 1.8 ng/L | U MB |
| PWS1080-IS-042721-100 | Perfluoropentanesulfonic acid | 0.83 ng/L | J DL |
| PWS1080-IS-042721-100 | Perfluorohexanoic acid | 0.54 ng/L | J DL |
| PWS1080-IS-042721-100 | Perfluorobutanoic acid | 3.6 ng/L | J DL |
| PWS1080-IS-042721-100 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |
| PWS1084-OS-042821-100 | Perfluorooctanesulfonic acid | 1.9 ng/L | J EMPC |
| PWS1084-OS-042821-100 | Perfluorobutanoic acid | 4.0 ng/L | J DL |
| PWS1084-OS-042821-100 | Perfluorobutanesulfonic acid | 0.68 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorooctanesulfonic acid | 0.85 ng/L | J EMPC, DL |
| PWS1085-OS-042821-100 | Perfluoropentanesulfonic acid | 0.63 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1085-OS-042821-100 | Perfluorohexanoic acid | 0.71 ng/L | J DL |
| PWS1085-OS-042821-100 | N-Methyl perfluorooctane sulfonamide | 0.42 ng/L | J EMPC, DL |
| PWS1085-OS-042821-100 | Perfluorodecanoic acid | 0.59 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorodecanesulfonic acid | 0.34 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorohexanesulfonic acid | 1.8 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorobutanoic acid | 3.4 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorobutanesulfonic acid | 1.1 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluoroheptanoic acid | 0.33 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluoroheptanesulfonic acid | 0.29 ng/L | J DL |
| PWS1085-OS-042821-100 | Perfluorononanoic acid | 0.35 ng/L | J DL |
| PWS1085-OS-042821-100 | 9Cl-PF3ONS | 0.37 ng/L | J DL |
| PWS1085-OS-042821-100 | 4:2 Fluorotelomer sulfonic acid | 0.38 ng/L | J DL |
| PWS1086-OS-042721-100 | Perfluorooctanesulfonic acid | 2.9 ng/L | J EMPC |
| PWS1086-OS-042721-100 | Perfluoropentanesulfonic acid | 0.36 ng/L | J DL |
| PWS1086-OS-042721-100 | Perfluorobutanesulfonic acid | 1.2 ng/L | J DL |
| PWS1090-OS-042721-100 | Perfluorooctanesulfonic acid | 4.0 ng/L | J EMPC |
| PWS1090-OS-042721-100 | Perfluoropentanoic acid | 1.2 ng/L | J DL |
| PWS1090-OS-042721-100 | Perfluoropentanesulfonic acid | 1.0 ng/L | J DL |
| PWS1090-OS-042721-100 | Perfluorobutanesulfonic acid | 1.7 ng/L | J DL |
| PWS1090-OS-042721-100 | Perfluoroheptanoic acid | 0.63 ng/L | J DL |
| PWS1091-OS-042721-100 | Perfluorooctanesulfonic acid | 1.1 ng/L | J EMPC, DL |
| PWS1091-OS-042721-100 | Perfluoropentanoic acid | 1.5 ng/L | J DL |
| PWS1091-OS-042721-100 | Perfluoropentanesulfonic acid | 0.37 ng/L | J DL |
| PWS1091-OS-042721-100 | Perfluorodecanoic acid | 0.30 ng/L | J DL |
| PWS1093-OS-042721-100 | Perfluoropentanoic acid | 1.5 ng/L | J DL |
| PWS1093-OS-042721-100 | Perfluoropentanesulfonic acid | 0.75 ng/L | J DL |
| PWS1093-OS-042721-100 | Perfluorohexanesulfonic acid | 1.4 ng/L | J DL |
| PWS1093-OS-042721-100 | Perfluoroheptanoic acid | 0.95 ng/L | J DL |
| PWS1094-OS-042721-100 | Perfluorooctanesulfonic acid | 3.2 ng/L | J EMPC |
| PWS1094-OS-042721-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1094-OS-042721-100 | Perfluorobutanoic acid | 3.9 ng/L | J DL |
| PWS1095-IS-042821-100 | Perfluorooctanesulfonic acid | 0.76 ng/L | J DL |
| PWS1095-IS-042821-100 | Perfluorobutanesulfonic acid | 0.39 ng/L | J DL |
| PWS1096-OS-042721-100 | Perfluorooctanesulfonic acid | 3.6 ng/L | J EMPC |
| PWS1096-OS-042721-100 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS1096-OS-042721-100 | Perfluorooctanoic acid | 0.84 ng/L | J DL |
| PWS1096-OS-042721-100 | Perfluorobutanesulfonic acid | 1.5 ng/L | J DL |
| PWS1097-OS-042621-100 | Perfluorooctanesulfonic acid | 1.8 ng/L | U MB |
| PWS1097-OS-042621-100 | Perfluorohexanesulfonic acid | 0.88 ng/L | J DL |
| PWS1097-OS-042621-100 | Perfluorobutanesulfonic acid | 0.70 ng/L | J DL |
| PWS1099-OS-042721-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1099-OS-042721-100 | Perfluoropentanesulfonic acid | 0.59 ng/L | J DL |
| PWS1099-OS-042721-100 | Perfluoroheptanoic acid | 1.3 ng/L | J DL |
| PWS1104-OS-042621-100 | Perfluorohexanesulfonic acid | 0.90 ng/L | J DL |
| PWS1104-OS-042621-100 | Perfluorobutanoic acid | 3.1 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1104-OS-042621-100 | Perfluorobutanesulfonic acid | 1.3 ng/L | J DL |
| PWS1105-OS-042621-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1115-OS-042821-100 | Perfluoropentanoic acid | 1.6 ng/L | J DL |
| PWS1115-OS-042821-100 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS1115-OS-042821-100 | Perfluorohexanesulfonic acid | 0.96 ng/L | J DL |
| PWS1115-OS-042821-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL |
| PWS1118-OS-042821-100 | Perfluoropentanoic acid | 0.89 ng/L | J DL |
| PWS1118-OS-042821-100 | Perfluorohexanoic acid | 1.2 ng/L | J DL |
| PWS1118-OS-042821-100 | Perfluorodecanoic acid | 0.37 ng/L | J DL |
| PWS1118-OS-042821-100 | Perfluorohexanesulfonic acid | 0.77 ng/L | J DL |
| PWS1118-OS-042821-100 | Perfluoroheptanoic acid | 0.68 ng/L | J DL |
| PWS1121-OS-042721-100 | Perfluorooctanesulfonic acid | 10 ng/L | J EMPC |
| PWS1121-OS-042721-100 | Perfluoropentanoic acid | 1.4 ng/L | J DL |
| PWS1121-OS-042721-100 | Perfluoropentanesulfonic acid | 0.51 ng/L | J DL |
| PWS1121-OS-042721-100 | Perfluoroheptanesulfonic acid | 0.36 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluoropentanoic acid | 1.5 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluorohexanoic acid | 1.6 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluorohexanesulfonic acid | 0.84 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluorobutanoic acid | 2.3 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluorobutanesulfonic acid | 1.2 ng/L | J DL |
| PWS1129-OS-042821-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL, FD |
| PWS1132-OS-042621-100 | Perfluoropentanesulfonic acid | 1.1 ng/L | J DL |
| PWS1132-OS-042621-100 | Perfluoroheptanesulfonic acid | 0.47 ng/L | J DL |
| PWS1132-OS-042621-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1141-OS-042821-100 | Perfluorooctanesulfonic acid | 2.2 ng/L | J EMPC |
| PWS1141-OS-042821-100 | Perfluorohexanesulfonic acid | 1.2 ng/L | J DL |
| PWS1141-OS-042821-100 | Perfluorobutanesulfonic acid | 0.44 ng/L | J DL |
| PWS1150-OS-042821-100 | Perfluorohexanesulfonic acid | 0.72 ng/L | J DL |
| PWS1150-OS-042821-100 | Perfluorobutanesulfonic acid | 0.24 ng/L | J DL |
| PWS1158-OS-042821-100 | Perfluorohexanesulfonic acid | 0.89 ng/L | J DL |
| PWS1158-OS-042821-100 | Perfluorobutanesulfonic acid | 0.78 ng/L | J DL |
| PWS1164-IS-042821-100 | Perfluorooctanesulfonic acid | 1.1 ng/L | J DL |
| PWS1167-OS-042621-100 | Perfluorooctanesulfonic acid | 1.9 ng/L | U MB |
| PWS1167-OS-042621-100 | Perfluoropentanesulfonic acid | 0.49 ng/L | J DL |
| PWS1177-OS-042821-100 | Perfluorooctanesulfonic acid | 4.9 ng/L | J EMPC |
| PWS1177-OS-042821-100 | Perfluoropentanesulfonic acid | 0.32 ng/L | J DL |
| PWS1177-OS-042821-100 | Perfluorohexanoic acid | 1.6 ng/L | J DL |
| PWS1177-OS-042821-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1177-OS-042821-100 | Perfluorobutanoic acid | 4.6 ng/L | J DL |
| PWS1177-OS-042821-100 | Perfluoroheptanoic acid | 0.80 ng/L | J DL |
| PWS1178-OS-042821-100 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS1178-OS-042821-100 | Perfluoropentanesulfonic acid | 0.38 ng/L | J DL |
| PWS1178-OS-042821-100 | Perfluorohexanoic acid | 1.1 ng/L | J DL |
| PWS1178-OS-042821-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1178-OS-042821-100 | Perfluoroheptanoic acid | 0.52 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1182-OS-042621-100 | Perfluoropentanesulfonic acid | 1.7 ng/L | J DL |
| PWS1182-OS-042621-100 | Perfluorohexanoic acid | 0.93 ng/L | J DL |
| PWS1182-OS-042621-100 | Perfluorooctanoic acid | 1.2 ng/L | J DL |
| PWS1182-OS-042621-100 | Perfluorobutanoic acid | 3.1 ng/L | J DL |
| PWS1182-OS-042621-100 | Perfluoroheptanesulfonic acid | 0.26 ng/L | J DL |
| PWS1082-OS-042821-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1082-OS-042821-100 | Perfluorobutanesulfonic acid | 1.0 ng/L | J DL |
| PWS1186-IS-042821-100 | Perfluorohexanesulfonic acid | 1.8 ng/L | J DL |
| PWS1186-IS-042821-100 | Perfluorobutanoic acid | 2.7 ng/L | J DL |
| PWS1187-OS-042721-100 | Perfluorooctanesulfonic acid | 1.4 ng/L | J DL |
| PWS1187-OS-042721-100 | Perfluoropentanesulfonic acid | 0.91 ng/L | J DL |
| PWS1187-OS-042721-100 | Perfluorohexanoic acid | 0.93 ng/L | J DL |
| PWS1187-OS-042721-100 | Perfluorohexanesulfonic acid | 1.7 ng/L | J EMPC |
| PWS1187-OS-042721-100 | Perfluorobutanoic acid | 4.0 ng/L | J DL |
| PWS1187-OS-042721-100 | Perfluorobutanesulfonic acid | 2.7 ng/L | J EMPC |
| PWS1187-OS-042721-100 | Perfluoroheptanoic acid | 0.60 ng/L | J DL |
| PWS1199-IS-042821-100 | Perfluorooctanesulfonic acid | 0.85 ng/L | J DL |
| PWS-FD01-042721 | Perfluoropentanesulfonic acid | 0.30 ng/L | J DL |
| PWS-FD01-042721 | Perfluorohexanoic acid | 0.55 ng/L | J DL |
| PWS-FD01-042721 | Perfluorooctanoic acid | 1.6 ng/L | J DL |
| PWS-FD01-042721 | Perfluorodecanoic acid | 0.51 ng/L | J DL |
| PWS-FD01-042721 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS-FD01-042721 | Perfluorononanoic acid | 0.42 ng/L | J DL |
| PWS-FD01-042721 | Perfluorooctane sulfonamide | 0.98 ng/L | J DL |
| PWS-FD01-042821 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS-FD01-042821 | Perfluorohexanoic acid | 1.8 ng/L | J DL |
| PWS-FD01-042821 | Perfluorohexanesulfonic acid | 0.77 ng/L | J DL |
| PWS-FD01-042821 | Perfluorobutanoic acid | 2.3 ng/L | J DL |
| PWS-FD01-042821 | Perfluorobutanesulfonic acid | 1.2 ng/L | J DL |
| PWS-FD01-042821 | Perfluoroheptanoic acid | 0.59 ng/L | J DL, FD |
| PWS-FD02-042621 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS-FD02-042721 | Perfluorooctanesulfonic acid | 1.1 ng/L | J EMPC, DL |
| PWS-FD02-042721 | Perfluoropentanoic acid | 1.3 ng/L | J DL |
| PWS-FD02-042721 | Perfluoropentanesulfonic acid | 0.44 ng/L | J DL |
| PWS-FD02-042721 | Perfluoroheptanoic acid | 1.7 ng/L | J DL |
| PWS-FD02-042821 | Perfluoropentanoic acid | 0.95 ng/L | J DL |
| PWS-FD02-042821 | Perfluorohexanoic acid | 1.4 ng/L | J DL |
| PWS-FD02-042821 | Perfluorohexanesulfonic acid | 0.67 ng/L | J DL |
| PWS-FD02-042821 | Perfluoroheptanoic acid | 0.67 ng/L | J DL |

**Notes:**
ng/L = nanograms per liter
9Cl-PF3ONS = 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|

**Qualifiers:**

J = The reported result was an estimated value with an unknown bias.

U = The analyte was not detected.

**Reason Codes:**

DL = The detected concentrations is less than the reporting limit.

EMPC = Transition ion ratios were outside of expected limits.

FD = Imprecision between primary and field duplicate results.

MB = The analyte was detected in the associated laboratory blank and the concentration detected in the sample is less than 10 times the concentration detected in the blank.

# PFAS Data Validation Checklist

| Laboratory Reports: J72788-1/J72788-2 | Yes | No | NA |
|---|---|---|---|
| **I Sample Handling:** | | | |
| 1. Were samples received by the laboratory in containers with PTFE components? | | X | |
| **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. Were tissue samples in a frozen state when received by the laboratory? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. Were solid and/or aqueous field samples extracted within 28 days from collection? | X | | |
| b. Were tissue samples extracted within 1 year from collection? | | | X |
| c. Were extracts analyzed within 30 days from extraction? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II Field Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated equipment and/or field blanks? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | X | | |
| b. Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | | X[1] | |
| c. Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III Laboratory Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated laboratory blank? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. Solid and Aqueous Samples: | | | |
| i 50 to 150% for low-level spikes | | | X |
| ii 60 to 135% for mid- or high-level spikes | X | | |
| b. Tissue Samples: | | | |
| i 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii 60 to 135% for all other PFAS | | | X |
| **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| **If No and recovery is high**: J qualify detected results (J-HL) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J72788-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | | X[2,3,4] | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | X | | |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | X | | |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J72788-1/J72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| | a. 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| | b. 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

$X^1$ The RPD between Perfluorobutanesulfonic acid (PFBS) results from sample PWS1180-OS-042921-100 and its field duplicate PWS-FD01-042921 was high at 81.1%. Wood J qualified the detected PFBS results from these samples because of potential sampling and/or analytical imprecision.

$X^2$ Recoveries of the labeled internal standards M2-4:2 FTS (157%), M2-6:2 FTS (175%), and $^{13}C_2$ 10:2 FTS (151%) were high in sample PWS1073-OS-043021-100 (157%). Wood J qualified the non-detected 4:2 FTS, 6:2 FTS, and 10:2 FTS results from the affected sample because of the high labeled internal standard recoveries.

**Table 1**
**Field Samples Submitted to Eurofins Environment Testing America**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1180-OS-042921-100 | 4/29/2021 9:27 | 320-73172-1 | |
| PWS-FD01-042921 | 4/29/2021 12:01 | 320-73172-3 | Field duplicate of PWS1180-OS-042921-100 |
| PWS1013-OS-042921-100 | 4/29/2021 10:30 | 320-73172-4 | MS/MSD |
| PWS1012-OS-042921-100 | 4/29/2021 15:45 | 320-73172-6 | |
| PWS1076-OS-042921-100 | 4/29/2021 16:27 | 320-73172-8 | |
| PWS1191-OS-042921-100 | 4/29/2021 17:38 | 320-73172-10 | |
| PWS1147-OS-042921-100 | 4/29/2021 8:40 | 320-73172-12 | |
| PWS-FD02-042921 | 4/29/2021 12:02 | 320-73172-14 | Field duplicate of PWS1147-OS-042921-100 |
| PWS1089-OS-042921-100 | 4/29/2021 9:25 | 320-73172-15 | |
| PWS1101-OS-042921-100 | 4/29/2021 10:10 | 320-73172-17 | |
| PWS1092-OS-042921-100 | 4/29/2021 11:30 | 320-73172-19 | |
| PWS1125-OS-042921-100 | 4/29/2021 12:10 | 320-73172-21 | |
| PWS1155-OS-042921-100 | 4/29/2021 13:20 | 320-73172-23 | |
| PWS1127-OS-042921-100 | 4/29/2021 14:05 | 320-73172-25 | |
| PWS1106-OS-042921-100 | 4/29/2021 14:50 | 320-73172-27 | |
| PWS1161-OS-042921-100 | 4/29/2021 16:10 | 320-73172-29 | |
| PWS1114-OS-042921-100 | 4/29/2021 17:15 | 320-73172-31 | |
| PWS1070-OS-043021-100 | 4/30/2021 9:34 | 320-73172-33 | |
| PWS1073-OS-043021-100 | 4/30/2021 10:11 | 320-73172-35 | |
| PWS1174-OS-043021-100 | 4/30/2021 10:58 | 320-73172-37 | |
| PWS1019-OS-043021-100 | 4/30/2021 12:36 | 320-73172-39 | |
| PWS1044-OS-043021-100 | 4/30/2021 14:40 | 320-73172-41 | |
| PWS1034-IS-043021-100 | 4/30/2021 15:42 | 320-73172-43 | |
| PWS1036-OS-043021-100 | 4/30/2021 16:35 | 320-73172-45 | |
| PWS1023-OS-043021-100 | 4/30/2021 17:13 | 320-73172-47 | |
| PWS1023-OS-043021-200 | 4/30/2021 16:54 | 320-73172-48 | Field blank |
| PWS1088-OS-043021-100 | 4/30/2021 18:31 | 320-73172-49 | |
| PWS1103-OS-043021-100 | 4/30/2021 8:45 | 320-73172-51 | MS/MSD |
| PWS1134-OS-043021-100 | 4/30/2021 9:35 | 320-73172-53 | |
| PWS-FD02-043021 | 4/30/2021 12:02 | 320-73172-55 | Field duplicate of PWS1134-OS-043021-100 |
| PWS1135-OS-043021-100 | 4/30/2021 10:00 | 320-73172-56 | |
| PWS1136-OS-043021-100 | 4/30/2021 10:30 | 320-73172-58 | |
| PWS1195-OS-043021-100 | 4/30/2021 11:50 | 320-73172-60 | |
| PWS1189-OS-043021-100 | 4/30/2021 13:40 | 320-73172-62 | |
| PWS1110-IS-043021-100 | 4/30/2021 13:30 | 320-73172-64 | |
| PWS1063-OS-043021-100 | 4/30/2021 14:31 | 320-73172-66 | |
| PWS1063-OS-050121-200 | 5/1/2021 14:05 | 320-73172-67 | Field blank |
| PWS1160-OS-043021-100 | 4/30/2021 17:29 | 320-73172-68 | |

**Note:**
MS/MSD = matrix spike/matrix spike duplicate

**Table 2**

**Precision Between Detections in the Primary Samples and Their Field Duplicates**

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1180-OS-042921-100 and PWS-FD01-042921 | | | | | |
| PFBS | 1.9 ng/L | 0.22 J | 0.52 J | 81% | J-FD |
| FOSA | 1.9 ng/L | 1.5 J | 1.9 | 24% | |
| Samples PWS1147-OS-042921-100 and PWS-FD02-042921 | | | | | |
| PFBA | 4.8 ng/L | 5.8 | 5.7 | 1.7% | |
| PFPeA | 1.9 ng/L | 0.82 J | 0.90 J | 9.3% | |
| PFOA | 1.9 ng/L | 2.1 | 1.8 J | 15% | |
| PFBS | 1.9 ng/L | 2.4 | 1.8 J | 29% | |
| PFPeS | 1.9 ng/L | 0.65 J | 0.55 J | 17% | |
| PFHxS | 1.9 ng/L | 2.1 | 2.1 | 0.0% | |
| PFHpS | 1.9 ng/L | 0.26 J | 0.27 J | 3.8% | |
| PFOS | 1.9 ng/L | 9.7 I | 9.6 | 1.0% | |
| FOSA | 1.9 ng/L | 0.98 J | 1.9 U | NC | ± RL |
| Samples PWS1134-OS-043021-100 and PWS-FD02-043021 | | | | | |
| PFBA | 4.7 ng/L | 8.6 | 8.7 | 1.2% | |
| PFPeA | 1.9 ng/L | 0.47 J | 1.9 U | NC | ± RL |
| PFHxA | 1.9 ng/L | 0.82 J | 0.77 J | 6.3% | |
| PFOA | 1.9 ng/L | 2.5 | 2.4 | 4.1% | |
| PFDA | 1.9 ng/L | 0.34 J | 1.8 U | NC | ± RL |
| PFBS | 1.9 ng/L | 12 | 13 | 8.0% | |
| PFPeS | 1.9 ng/L | 1.9 U | 0.28 J | NC | ± RL |
| PFHxS | 1.9 ng/L | 4.1 | 4.0 | 2.5% | |
| PFOS | 1.9 ng/L | 4.1 | 4.0 | 2.5% | |
| FOSA | 1.9 ng/L | 2.0 | 1.4 J | 35% | ± RL |

**Notes:**

FOSA = perfluorooctanesulfonamide

NC = not calculable

ng/L = nanograms per liter

PFBA = perfluorobutanoic acid

PFBS = perfluorobutanesulfonic acid

PFDA = perfluorodecanoic acid

PFHpS = perfluoroheptanesulfonic acid

PFHxA = perfluorohexanoic acid

PFHxS = perfluorohexanesulfonic acid

PFOA = perfluorooctanoic acid

PFOS = perfluorooctanesulfonic acid

PFPeA = perfluoropentanoic acid

PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**

J = The reported result was an estimated value with an unknown bias.

U = The analyte was not detected.

## Table 2

## Precision Between Detections in the Primary Samples and Their Field Duplicates

**Reason Codes:**

FD = Imprecision between primary and field duplicate results.

± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1012-OS-042921-100 | Perfluorohexanesulfonic acid | 0.55 ng/L | J DL |
| PWS1012-OS-042921-100 | Perfluorobutanesulfonic acid | 1.5 ng/L | J DL |
| PWS1013-OS-042921-100 | Perfluorooctanoic acid | 1.3 ng/L | J DL |
| PWS1013-OS-042921-100 | Perfluorohexanesulfonic acid | 0.63 ng/L | J DL |
| PWS1013-OS-042921-100 | Perfluorobutanesulfonic acid | 1.1 ng/L | J DL, EMPC |
| PWS1019-OS-043021-100 | Perfluorohexanesulfonic acid | 0.87 ng/L | J DL |
| PWS1019-OS-043021-100 | Perfluorononanoic acid | 0.42 ng/L | J DL |
| PWS1023-OS-043021-100 | Perfluoropentanesulfonic acid | 0.52 ng/L | J DL |
| PWS1023-OS-043021-100 | Perfluorohexanoic acid | 0.89 ng/L | J DL |
| PWS1023-OS-043021-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1034-IS-043021-100 | Perfluoropentanesulfonic acid | 0.32 ng/L | J DL |
| PWS1034-IS-043021-100 | Perfluorohexanoic acid | 1.5 ng/L | J DL |
| PWS1034-IS-043021-100 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS1034-IS-043021-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1036-OS-043021-100 | Perfluorooctanesulfonic acid | 1.4 ng/L | J DL |
| PWS1036-OS-043021-100 | Perfluorohexanoic acid | 0.9 ng/L | J DL |
| PWS1036-OS-043021-100 | Perfluorohexanesulfonic acid | 0.75 ng/L | J DL |
| PWS1036-OS-043021-100 | Perfluorobutanesulfonic acid | 1.4 ng/L | J DL |
| PWS1036-OS-043021-100 | Perfluorooctane sulfonamide | 1 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluorooctanesulfonic acid | 1.8 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluoropentanoic acid | 1.6 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluoropentanesulfonic acid | 0.36 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluorohexanoic acid | 1.5 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluorooctanoic acid | 1.20 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1044-OS-043021-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1063-OS-043021-100 | Perfluorooctanesulfonic acid | 24 ng/L | J EMPC |
| PWS1063-OS-043021-100 | Perfluorohexanoic acid | 0.67 ng/L | J DL |
| PWS1063-OS-043021-100 | Perfluoroheptanesulfonic acid | 0.74 ng/L | J DL, EMPC |
| PWS1063-OS-043021-100 | Perfluorooctane sulfonamide | 1.60 ng/L | J DL |
| PWS1070-OS-043021-100 | Perfluoropentanesulfonic acid | 1.1 ng/L | J DL |
| PWS1070-OS-043021-100 | Perfluorooctanoic acid | 0.8 ng/L | J DL |
| PWS1070-OS-043021-100 | Perfluorobutanoic acid | 2.8 ng/L | J DL |
| PWS1070-OS-043021-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1073-OS-043021-100 | 10:2 Fluorotelomer sulfonic acid | 1.9 ng/L | UJ HI |
| PWS1073-OS-043021-100 | 6:2 Fluorotelomer sulfonic acid | 4.6 ng/L | UJ HI |
| PWS1073-OS-043021-100 | Perfluorooctanoic acid | 1.3 ng/L | J DL |
| PWS1073-OS-043021-100 | Perfluorobutanoic acid | 3.9 ng/L | J DL |
| PWS1073-OS-043021-100 | 4:2 Fluorotelomer sulfonic acid | 1.9 ng/L | UJ HI |
| PWS1076-OS-042921-100 | Perfluorooctanesulfonic acid | 0.51 ng/L | J DL |
| PWS1076-OS-042921-100 | Perfluoropentanesulfonic acid | 0.49 ng/L | J DL |
| PWS1076-OS-042921-100 | Perfluorohexanesulfonic acid | 1 ng/L | J DL |
| PWS1076-OS-042921-100 | Perfluorobutanesulfonic acid | 1.1 ng/L | J DL |
| PWS1076-OS-042921-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1088-OS-043021-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1088-OS-043021-100 | Perfluorobutanoic acid | 4.3 ng/L | J DL |
| PWS1088-OS-043021-100 | Perfluorobutanesulfonic acid | 1.7 ng/L | J DL |
| PWS1088-OS-043021-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1089-OS-042921-100 | Perfluorooctanesulfonic acid | 2.4 ng/L | J EMPC |
| PWS1089-OS-042921-100 | Perfluoropentanoic acid | 0.91 ng/L | J DL |
| PWS1089-OS-042921-100 | Perfluoropentanesulfonic acid | 0.41 ng/L | J DL |
| PWS1089-OS-042921-100 | Perfluorooctanoic acid | 1.1 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluoropentanesulfonic acid | 0.33 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluorooctanoic acid | 1.4 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluorohexanesulfonic acid | 0.91 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluorobutanoic acid | 3.1 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluorobutanesulfonic acid | 0.73 ng/L | J DL |
| PWS1092-OS-042921-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL |
| PWS1101-OS-042921-100 | Perfluorohexanesulfonic acid | 0.56 ng/L | J DL |
| PWS1101-OS-042921-100 | Perfluorobutanoic acid | 3.1 ng/L | J DL |
| PWS1101-OS-042921-100 | Perfluorobutanesulfonic acid | 0.24 ng/L | J DL |
| PWS1103-OS-043021-100 | Perfluoropentanoic acid | 0.94 ng/L | J DL |
| PWS1103-OS-043021-100 | Perfluorobutanoic acid | 2.8 ng/L | J DL |
| PWS1103-OS-043021-100 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |
| PWS1106-OS-042921-100 | Perfluoropentanesulfonic acid | 0.51 ng/L | J DL |
| PWS1106-OS-042921-100 | Perfluorohexanesulfonic acid | 0.55 ng/L | J DL |
| PWS1106-OS-042921-100 | Perfluorobutanesulfonic acid | 0.35 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluoropentanoic acid | 1.7 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluorohexanoic acid | 1.7 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluorooctanoic acid | 1 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluorohexanesulfonic acid | 0.6 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluorobutanoic acid | 3 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluorobutanesulfonic acid | 0.19 ng/L | J DL |
| PWS1110-IS-043021-100 | Perfluoroheptanoic acid | 0.56 ng/L | J DL |
| PWS1114-OS-042921-100 | Perfluorooctanoic acid | 0.92 ng/L | J DL |
| PWS1114-OS-042921-100 | Perfluorooctane sulfonamide | 1.2 ng/L | J DL |
| PWS1125-OS-042921-100 | Perfluoropentanesulfonic acid | 0.49 ng/L | J DL |
| PWS1125-OS-042921-100 | Perfluorohexanoic acid | 0.74 ng/L | J DL |
| PWS1125-OS-042921-100 | Perfluorobutanesulfonic acid | 1.7 ng/L | J DL |
| PWS1125-OS-042921-100 | Perfluoroheptanesulfonic acid | 0.24 ng/L | J DL |
| PWS1125-OS-042921-100 | Perfluorooctane sulfonamide | 1 ng/L | J DL |
| PWS1127-OS-042921-100 | Perfluorooctanesulfonic acid | 3.3 ng/L | J EMPC |
| PWS1127-OS-042921-100 | Perfluorooctanoic acid | 0.99 ng/L | J DL |
| PWS1127-OS-042921-100 | Perfluorohexanesulfonic acid | 0.8 ng/L | J DL, EMPC |
| PWS1127-OS-042921-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1127-OS-042921-100 | Perfluorobutanesulfonic acid | 0.84 ng/L | J DL, EMPC |
| PWS1134-OS-043021-100 | Perfluoropentanoic acid | 0.47 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1134-OS-043021-100 | Perfluorohexanoic acid | 0.82 ng/L | J DL |
| PWS1134-OS-043021-100 | Perfluorodecanoic acid | 0.34 ng/L | J DL |
| PWS1135-OS-043021-100 | Perfluorodecanoic acid | 0.56 ng/L | J DL |
| PWS1135-OS-043021-100 | Perfluorohexanesulfonic acid | 0.79 ng/L | J DL |
| PWS1135-OS-043021-100 | Perfluorobutanoic acid | 3.6 ng/L | J DL |
| PWS1135-OS-043021-100 | Perfluorononanoic acid | 0.57 ng/L | J DL |
| PWS1135-OS-043021-100 | Perfluorooctane sulfonamide | 1.50 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluoropentanoic acid | 1.5 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluoropentanesulfonic acid | 0.58 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluorodecanoic acid | 0.3 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluorobutanoic acid | 3.40 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluoroheptanoic acid | 1.3 ng/L | J DL |
| PWS1136-OS-043021-100 | Perfluoroheptanesulfonic acid | 0.32 ng/L | J DL |
| PWS1147-OS-042921-100 | Perfluorooctanesulfonic acid | 9.7 ng/L | J EMPC |
| PWS1147-OS-042921-100 | Perfluoropentanoic acid | 0.82 ng/L | J DL |
| PWS1147-OS-042921-100 | Perfluoropentanesulfonic acid | 0.7 ng/L | J DL |
| PWS1147-OS-042921-100 | Perfluoroheptanesulfonic acid | 0.26 ng/L | J DL |
| PWS1147-OS-042921-100 | Perfluorooctane sulfonamide | 0.98 ng/L | J DL |
| PWS1155-OS-042921-100 | Perfluoropentanesulfonic acid | 0.29 ng/L | J DL |
| PWS1155-OS-042921-100 | Perfluorohexanoic acid | 0.96 ng/L | J DL |
| PWS1155-OS-042921-100 | Perfluorooctanoic acid | 1.7 ng/L | J DL |
| PWS1155-OS-042921-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1160-OS-043021-100 | Perfluorooctanesulfonic acid | 0.53 ng/L | J DL |
| PWS1160-OS-043021-100 | Perfluorohexanesulfonic acid | 0.65 ng/L | J DL |
| PWS1160-OS-043021-100 | Perfluorobutanesulfonic acid | 0.41 ng/L | J DL |
| PWS1160-OS-043021-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1161-OS-042921-100 | Perfluorobutanesulfonic acid | 0.7 ng/L | J DL |
| PWS1174-OS-043021-100 | Perfluoropentanoic acid | 1.7 ng/L | J DL |
| PWS1174-OS-043021-100 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS1174-OS-043021-100 | Perfluorohexanoic acid | 0.88 ng/L | J DL |
| PWS1174-OS-043021-100 | Perfluorohexanesulfonic acid | 0.97 ng/L | J DL |
| PWS1174-OS-043021-100 | Perfluorobutanesulfonic acid | 1 ng/L | J DL |
| PWS1180-OS-042921-100 | Perfluorobutanesulfonic acid | 0.22 ng/L | J FD, DL |
| PWS1180-OS-042921-100 | Perfluorooctane sulfonamide | 1.5 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorooctanesulfonic acid | 5.6 ng/L | J EMPC |
| PWS1189-OS-043021-100 | Perfluoropentanesulfonic acid | 1.3 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorooctanoic acid | 0.97 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorodecanoic acid | 0.31 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorobutanoic acid | 2.8 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorobutanesulfonic acid | 1.6 ng/L | J DL |
| PWS1189-OS-043021-100 | Perfluorooctane sulfonamide | 1.3 ng/L | J DL |
| PWS1195-OS-043021-100 | Perfluorodecanoic acid | 0.36 ng/L | J DL |
| PWS1195-OS-043021-100 | Perfluorooctane sulfonamide | 1.9 ng/L | J DL |

**Table 3**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS-FD01-042921 | Perfluorobutanesulfonic acid | 0.52 ng/L | J FD, DL |
| PWS-FD02-042921 | Perfluorooctanesulfonic acid | 9.6 ng/L | J EMPC |
| PWS-FD02-042921 | Perfluoropentanoic acid | 0.9 ng/L | J DL |
| PWS-FD02-042921 | Perfluoropentanesulfonic acid | 0.55 ng/L | J DL |
| PWS-FD02-042921 | Perfluorooctanoic acid | 1.8 ng/L | J DL |
| PWS-FD02-042921 | Perfluorobutanesulfonic acid | 1.8 ng/L | J DL |
| PWS-FD02-042921 | Perfluoroheptanesulfonic acid | 0.27 ng/L | J DL |
| PWS-FD02-043021 | Perfluoropentanesulfonic acid | 0.28 ng/L | J DL |
| PWS-FD02-043021 | Perfluorohexanoic acid | 0.77 ng/L | J DL |
| PWS-FD02-043021 | Perfluorooctane sulfonamide | 1.4 ng/L | J DL |

**Note:**
ng/L = nanograms per liter

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
UJ = The analyte was not detected and the reported result is an estimated value.

**Reason Codes:**
DL = The detected concentrations is less than the reporting limit.
EMPC = Transition ion ratios were outside of expected limits.
FD = Imprecision between primary and field duplicate results.
HI = High internal standard recovery.

# PFAS Data Validation Checklist

| | Laboratory Report: J73358-1 | Yes | No | NA |
|---|---|---|---|---|
| **I** | **Sample Handling:** | | | |
| 1. | Were samples received by the laboratory in containers with PTFE components? | | X | |
| | **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. | Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. | Were tissue samples in a frozen state when received by the laboratory? | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. | Were solid and/or aqueous samples extracted within 28 days from collection? | X | | |
| b. | Were tissue samples extracted within 1 year from collection? | | | X |
| c. | Were extracts analyzed within 30 days from extraction? | X | | |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II** | **Field Quality Control Samples:** | | | |
| 1. | Were target analytes detected in the associated equipment and/or field blanks? | | | X |
| | **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. | Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | | | X |
| b. | Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | | | X |
| c. | Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III** | **Laboratory Quality Control Samples:** | | | |
| 1. | Were target analytes detected in the associated laboratory blank? | | X | |
| | **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. | Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: | | | |
| i | 50 to 150% for low-level spikes | | | X |
| ii | 60 to 135% for mid- or high-level spikes | X | | |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| | **If No and recovery is high**: J qualify detected results (J-HL) | | | |

# PFAS Data Validation Checklist

| | Laboratory Report: J73358-1 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | X | | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | | | X |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | | | X |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Report: J73358-1 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| a. | 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| b. | 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

**Table 1**

**Field Samples Submitted to Eurofins Environment Testing America**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1192-OS-050421-100 | 5/4/2021 10:20 | 320-73358-1 | Logged in with a collection date of May 5, collection date recorded on the chain of custody is May 4 |
| PWS1149-OS-050421-100 | 5/4/2021 11:30 | 320-73358-3 | |
| PWS1128-OS-050421-100 | 5/4/2021 13:30 | 320-73358-5 | |
| PWS1087-OS-050421-100 | 5/4/2021 16:22 | 320-73358-7 | |
| PWS1140-OS-050421-100 | 5/4/2021 17:10 | 320-73358-9 | |
| PWS1171-IS-050421-100 | 5/4/2021 18:25 | 320-73358-11 | |
| PWS1148-IS-050521-100 | 5/5/2021 15:35 | 320-73358-13 | |
| PWS1166-OS-050521-100 | 5/5/2021 18:23 | 320-73358-15 | |

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1105-OS-042621-100 and PWS-FD02-042621 | | | | | |
| FOSA | 1.9 ng/L | 1.5 J | 1.2 J | 22% | |
| Samples PWS1005-OS-042721-100 and PWS-FD01-042721 | | | | | |
| PFBA | 4.7 ng/L | 14 | 15 | 6.9% | |
| PFHxA | 1.9 ng/L | 0.54 J | 0.55 J | 1.8% | |
| PFOA | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFNA | 1.9 ng/L | 0.44 J | 0.42 J | 4.7% | |
| PFDA | 1.9 ng/L | 0.54 J | 0.51 J | 5.7% | |
| PFBS | 1.9 ng/L | 3.9 | 4.2 | 7.4% | |
| PFPeS | 1.9 ng/L | 0.37 J | 0.30 J | 21% | |
| PFHxS | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFOS | 1.9 ng/L | 9.3 | 9.4 | 1.1% | |
| FOSA | 1.9 ng/L | 1.9 U | 0.98 J | NC | ± RL |
| Samples PWS1091-OS-042721-100 and PWS-FD02-042721 | | | | | |
| PFBA | 4.4 ng/L | 4.8 | 4.9 | 2.1% | |
| PFPeA | 1.8 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.8 ng/L | 2.2 | 2.2 | 0.0% | |
| PFHpA | 1.8 ng/L | 1.7 | 1.7 J | 0.0% | |
| PFOA | 1.8 ng/L | 2.8 | 2.6 | 7.4% | |
| PFDA | 1.8 ng/L | 0.30 J | 1.8 U | NC | ± RL |
| PFBS | 1.8 ng/L | 2.6 | 2.6 | 0.0% | |
| PFPeS | 1.8 ng/L | 0.37 J | 0.44 J | 17% | |
| PFHxS | 1.8 ng/L | 2.2 | 2.1 | 4.7% | |
| PFOS | 1.8 ng/L | 1.1 J | 1.1 J | 0.0% | |
| FOSA | 1.8 ng/L | 2.5 | 3.7 | 39% | ± RL |
| Samples PWS1129-OS-042821-100 and PWS-FD01-042821 | | | | | |
| PFBA | 4.7 ng/L | 2.3 J | 2.3 J | 0.0% | |
| PFPeA | 1.9 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.9 ng/L | 1.6 J | 1.8 J | 12% | |
| PFHpA | 1.9 ng/L | 1.1 J | 0.59 J | 60% | J-FD |
| PFOA | 1.9 ng/L | 2.7 | 2.1 | 25% | |
| PFBS | 1.9 ng/L | 1.2 J | 1.2 J | 0.0% | |
| PFHxS | 1.9 ng/L | 0.84 J | 0.77 J | 8.7% | |
| PFOS | 1.9 ng/L | 3.4 | 3.0 | 13% | |
| Samples PWS1118-OS-042821-100 and PWS-FD02-042821 | | | | | |
| PFBA | 4.8 ng/L | 5.7 | 5.9 | 3.4% | |
| PFPeA | 1.9 ng/L | 0.89 J | 0.95 J | 7% | |
| PFHxA | 1.9 ng/L | 1.2 J | 1.4 J | 15% | |
| PFHpA | 1.9 ng/L | 0.68 J | 0.67 J | 1% | |
| PFOA | 1.9 ng/L | 2.2 | 2.2 | 0.0% | |
| PFDA | 1.9 ng/L | 0.37 J | 1.9 U | NC | ± RL |
| PFBS | 1.9 ng/L | 2.2 | 2.0 | 9.5% | |
| PFHxS | 1.9 ng/L | 0.77 J | 0.67 J | 13.9% | |
| PFOS | 1.9 ng/L | 3.9 | 3.8 | 2.6% | |

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|

**Notes:**
FOSA = perfluorooctanesulfonamide
NC = not calculable
ng/L = nanograms per liter
PFBA = perfluorobutanoic acid
PFBS = perfluorobutanesulfonic acid
PFDA = perfluorodecanoic acid
PFHpA = perfluoroheptanoic acid
PFHpS = perfluoroheptanesulfonic acid
PFHxA = perfluorohexanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanoic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid
PFPeA = perfluoropentanoic acid
PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
U = The analyte was not detected.

**Reason Codes:**
FD = Imprecision between primary and field duplicate results.
< 2RL = The detected concentrations are less than twice the RL and the relative percent difference between results is less than 50%, indicating acceptable sampling and analytical precision.
± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 2**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1087-OS-050421-100 | Perfluoropentanoic acid | 0.56 ng/L | J DL |
| PWS1087-OS-050421-100 | Perfluoropentanesulfonic acid | 0.29 ng/L | J DL |
| PWS1087-OS-050421-100 | Perfluorohexanoic acid | 0.62 ng/L | J DL |
| PWS1087-OS-050421-100 | Perfluorooctanoic acid | 0.99 ng/L | J DL |
| PWS1087-OS-050421-100 | Perfluorobutanesulfonic acid | 1.6 ng/L | J DL |
| PWS1087-OS-050421-100 | Perfluoroheptanoic acid | 0.32 ng/L | J DL |
| PWS1128-OS-050421-100 | Perfluoropentanoic acid | 0.73 ng/L | J DL |
| PWS1128-OS-050421-100 | Perfluorohexanoic acid | 0.93 ng/L | J DL |
| PWS1128-OS-050421-100 | Perfluorobutanoic acid | 2.3 ng/L | J DL |
| PWS1128-OS-050421-100 | Perfluoroheptanoic acid | 0.65 ng/L | J DL |
| PWS1128-OS-050421-100 | Perfluoroheptanesulfonic acid | 0.19 ng/L | J DL |
| PWS1140-OS-050421-100 | Perfluorooctanesulfonic acid | 1.9 ng/L | J EMPC |
| PWS1140-OS-050421-100 | Perfluorohexanesulfonic acid | 0.70 ng/L | J DL |
| PWS1140-OS-050421-100 | Perfluorobutanesulfonic acid | 0.72 ng/L | J DL |
| PWS1140-OS-050421-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1148-IS-050521-100 | Perfluorooctanesulfonic acid | 1.1 ng/L | J EMPC, DL |
| PWS1148-IS-050521-100 | Perfluoropentanesulfonic acid | 0.53 ng/L | J DL |
| PWS1148-IS-050521-100 | Perfluorohexanesulfonic acid | 1.5 ng/L | J DL |
| PWS1148-IS-050521-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1148-IS-050521-100 | Perfluorobutanesulfonic acid | 1.4 ng/L | J DL |
| PWS1149-OS-050421-100 | Perfluoropentanesulfonic acid | 0.37 ng/L | J DL |
| PWS1149-OS-050421-100 | Perfluorobutanoic acid | 2.6 ng/L | J DL |
| PWS1149-OS-050421-100 | Perfluorobutanesulfonic acid | 0.82 ng/L | J DL |
| PWS1149-OS-050421-100 | Perfluoroheptanesulfonic acid | 0.21 ng/L | J DL |
| PWS1149-OS-050421-100 | Perfluorooctane sulfonamide | 1.0 ng/L | J DL |
| PWS1166-OS-050521-100 | Perfluoropentanesulfonic acid | 0.43 ng/L | J DL |
| PWS1166-OS-050521-100 | Perfluoroheptanesulfonic acid | 0.19 ng/L | J DL |
| PWS1166-OS-050521-100 | Perfluorooctane sulfonamide | 0.92 ng/L | J DL |
| PWS1171-IS-050421-100 | Perfluorobutanesulfonic acid | 0.23 ng/L | J DL |
| PWS1192-OS-050421-100 | Perfluorooctanesulfonic acid | 0.66 ng/L | J DL |
| PWS1192-OS-050421-100 | Perfluoroheptanesulfonic acid | 0.24 ng/L | J DL |

**Note:**
ng/L = nanograms per liter

**Qualifier:**
J = The reported result was an estimated value with an unknown bias.

**Reason Codes:**
DL = The detected concentrations is less than the reporting limit.
EMPC = Transition ion ratios were outside of expected limits.

# PFAS Data Validation Checklist

| Laboratory Reports: J73508-1/72788-2 | Yes | No | NA |
|---|---|---|---|
| **I Sample Handling:** | | | |
| 1. Were samples received by the laboratory in containers with PTFE components? | | X | |
| **If Yes**: R qualify and reject detected results. Non-detected results are not affected. (R-NP) | | | |
| 2. a. Were solid and/or aqueous samples received by the laboratory at temperatures ≤ 6°C, but not frozen? | X | | |
| b. Were tissue samples in a frozen state when received by the laboratory? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results, unless the samples were received by the laboratory within 8 hours of sampling and on ice. (J/UJ-RT) | | | |
| 3. a. Were solid and/or aqueous field samples extracted within 28 days from collection? | X | | |
| b. Were tissue samples extracted within 1 year from collection? | | | X |
| c. Were extracts analyzed within 30 days from extraction? | X | | |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-HT)<br>If hold time is grossly exceeded (more than twice the recommended hold time has elapsed), R qualify and reject non-detected results and J qualify detected results. (R/J-HT) | | | |
| **II Field Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated equipment and/or field blanks? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-EB and/or U-FB) | | | |
| 2. a. Were relative percent differences (RPDs) between primary and field duplicate results ≤ 30% when detected concentrations are > twice the reporting limit (RL)? | | | X |
| b. Were RPDs between primary and field duplicate results ≤ 50% when detected concentrations are ≤ twice the RL? | | | X |
| c. Is the difference between analyte concentrations ≤ the average RL when the analyte is detected in either the primary or duplicate sample but not in the other? | | | X |
| **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-FD) | | | |
| **III Laboratory Quality Control Samples:** | | | |
| 1. Were target analytes detected in the associated laboratory blank? | | X | |
| **If Yes**: U qualify target analyte detections in the associated samples with concentrations less than 10 times the concentration detected in the associated blank. (U-MB) | | | |
| 2. Are laboratory control sample (LCS) recoveries within the following ranges: | | | |
| a. Solid and Aqueous Samples: | | | |
| i 50 to 150% for low-level spikes | | | X |
| ii 60 to 135% for mid- or high-level spikes | X | | |
| b. Tissue Samples: | | | |
| i 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii 60 to 135% for all other PFAS | | | X |
| **If No and recovery is < half lower limit**: R qualify and reject non-detected results and J qualify detected results. (R/J-LL) | | | |
| **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LL) | | | |
| **If No and recovery is high**: J qualify detected results (J-HL) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J73508-1/72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are extracted internal standard recoveries within the following limits: | | | |
| a. | 10 to 150% for the extracted internal standards used to quantify FOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE, and N-EtFOSE? | X | | |
| b. | 25% to 150% for the extracted internal standards used to quantify all other target analytes | X | | |
| | **If No and recovery is > 250%**: R qualify and reject detected or non-detected results quantified using the affected internal standard. (R-HI) | | | |
| | **If No and recovery is high, but ≤ 250%**: J qualify detected results and UJ qualify non-detected results for analytes quantified using the affected internal standard.(J/UJ-HI) | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results for analytes quantified using the affected internal standard. (R/J-LI) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results quantified using the affected internal standard. (J-LI) | | | |
| 4. | Were matrix spike (MS) recoveries within the following ranges: | | | |
| a. | Solid and Aqueous Samples: 60 to 135% | | | X |
| b. | Tissue Samples: | | | |
| i | 40 to 135% for PFDS, PFDoS, and 4:2 FTS | | | X |
| ii | 50 to 135% for PFHxDA, PFODA, and N-MeFOSAA | | | X |
| iii | 60 to 135% for all other PFAS | | | X |
| | Do not evaluate MS recovery if the concentration detected in the unspiked native sample is > the spike concentration. | | | |
| | **If No and recovery is < 10%**: R qualify and reject non-detected results and J qualify detected results from the unspiked native sample. (R/J-LM) | | | |
| | **If No and recovery is low, but ≥ 10%**: J qualify detected results and UJ qualify non-detected results from the unspiked native sample. (J/UJ-LM) | | | |
| | **If No and recovery is high**: J qualify detected results from the unspiked native sample. (J-HM) | | | |
| c. | Is the RPD between MS and MS duplicate results ≤ 30%? | | | X |
| | **If No**: J qualify the result from the unspiked native sample if it was a detection. (J-HD) | | | |
| **IV** | **Initial and Continuing Calibration:** | | | |
| 1. | Have the following criteria been met for initial calibrations? | | | |
| a. | Relative standard deviation ≤ 20% for average response factor calibration models | | | X |
| b. | Coefficients of determination ≥ 0.99 for linear or quadratic calibration models | | | X |
| c. | Minimum of 6 calibration levels for quadratic calibration models or 5 calibration levels for other calibration models | | | X |
| d. | Linear and quadratic calibration models are not forced through zero | | | X |
| | **If No**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| e. | Analyte recoveries between 70 to 130% of their true value when each calibration standard is reprocessed through the curve. | | | X |
| | **If No and recovery is high**: J qualify detected results (J-BC) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-BC) | | | |
| | Use professional judgement if the only recovery outside of limits is for a calibration level ≤ the RL. | | | |
| 2. | Are initial calibration verification recoveries 70 to 130%? Note that ICVs are not required for PFHxDA, PFODA, PFDoS, N-MeFOSA, N-EtFOSA, N-MeFOSE, and N-EtFOSE until commercial second-source standards become available for these analytes. | | | X |
| | **If No and recovery is high**: J qualify detected results. (J-HV) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results. (J/UJ-LV) | | | |

# PFAS Data Validation Checklist

| | Laboratory Reports: J73508-1/72788-2 | Yes | No | NA |
|---|---|---|---|---|
| 3. | Are continuing calibration verification (CCV) recoveries within the following limits? | | | |
| a. | 50 to 150% for CCVs with concentrations equal to the RL | | | X |
| b. | 70 to 130% for all other CCVs | | | X |
| | **If No and recovery is high**: J qualify detected results for samples bracketing the CCV. (J-CH) | | | |
| | **If No and recovery is low**: J qualify detected results and UJ qualify non-detected results for samples bracketing the CCV. (J/UJ-LC) | | | |
| 4 | Were there detections in the continuing calibration blanks (CCBs)? | | | X |
| | **If Yes**: U qualify target analyte detections in the samples bracketing the CCB, if concentrations are less than 10 times the concentration detected in the associated blank. (B-CB) | | | |
| **V** | **Data Reporting and Analytical Procedures:** | | | |
| 1. | Results J qualified by the laboratory because detected concentrations are < RL will maintain their J qualifiers during validation. (J-DL) | | | |
| 2. | Results E qualified by the laboratory because their concentrations are greater than the calibration range will be J qualified during validation. (J-UC) | | | |
| 3. | Results qualified by the laboratory because ion transition ratios are outside of limits will be J qualified during validation. (J-EMPC) | | | |

**Notes:**

PFHxDA = perfluorohexadecanoic acid
PFODA = perfluorooctadecanoic acid
PFDS = perfluorodecanesulfonic acid
PFDoS = perfluorododecanesulfonic acid
4:2 FTS = 4:2 fluorotelomer sulfonic acid
FOSA = perfluorooctane sulfonamide
N-MeFOSA = N-methyl perfluorooctane sulfonamide
N-EtFOSA = N-ethyl perfluorooctane sulfonamide
N-MeFOSAA = N-methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA = N-ethyl perfluorooctane sulfonamidoacetic acid
N-MeFOSE = N-methyl perfluorooctane sulfonamidoethanol
N-EtFOSE = N-ethyl perfluorooctane sulfonamidoethanol

**Table 1**

**Field Samples Submitted to Eurofins Environment Testing America**

| Field Sample Identification | Collection Date and Time | Laboratory Sample Identification | Notes |
|---|---|---|---|
| PWS1130-OS-050621-100 | 5/6/2021 14:32 | 320-73508-1 | |
| PWS1203-OS-050621-100 | 5/6/2021 15:32 | 320-73508-3 | |
| PWS1194-OS-050621-100 | 5/6/2021 16:30 | 320-73508-5 | |
| PWS1154-OS-050621-100 | 5/6/2021 17:10 | 320-73508-7 | |
| PWS1154-OS-050621-200 | 5/6/2021 16:50 | 320-73508-8 | Field Blank |
| PWS1100-IS-050621-100 | 5/6/2021 18:31 | 320-73508-9 | |
| PWS1185-OS-050721-100 | 5/7/2021 11:53 | 320-73508-11 | |
| PWS1193-OS-050721-100 | 5/7/2021 12:29 | 320-73508-13 | |
| PWS1193-OS-050721-200 | 5/7/2021 12:11 | 320-73508-14 | Field Blank |
| PWS1196-OS-050721-100 | 5/7/2021 14:12 | 320-73508-15 | |
| PWS1113-OS-050721-100 | 5/7/2021 15:14 | 320-73508-17 | |
| PWS1112-OS-050721-100 | 5/7/2021 15:40 | 320-73508-19 | |
| PWS1197-OS-050721-100 | 5/7/2021 16:40 | 320-73508-21 | |
| PWS1198-IS-050721-100 | 5/7/2021 17:22 | 320-73508-23 | |

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|
| Samples PWS1105-OS-042621-100 and PWS-FD02-042621 | | | | | |
| FOSA | 1.9 ng/L | 1.5 J | 1.2 J | 22% | |
| Samples PWS1005-OS-042721-100 and PWS-FD01-042721 | | | | | |
| PFBA | 4.7 ng/L | 14 | 15 | 6.9% | |
| PFHxA | 1.9 ng/L | 0.54 J | 0.55 J | 1.8% | |
| PFOA | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFNA | 1.9 ng/L | 0.44 J | 0.42 J | 4.7% | |
| PFDA | 1.9 ng/L | 0.54 J | 0.51 J | 5.7% | |
| PFBS | 1.9 ng/L | 3.9 | 4.2 | 7.4% | |
| PFPeS | 1.9 ng/L | 0.37 J | 0.30 J | 21% | |
| PFHxS | 1.9 ng/L | 1.6 J | 1.6 J | 0.0% | |
| PFOS | 1.9 ng/L | 9.3 | 9.4 | 1.1% | |
| FOSA | 1.9 ng/L | 1.9 U | 0.98 J | NC | ± RL |
| Samples PWS1091-OS-042721-100 and PWS-FD02-042721 | | | | | |
| PFBA | 4.4 ng/L | 4.8 | 4.9 | 2.1% | |
| PFPeA | 1.8 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.8 ng/L | 2.2 | 2.2 | 0.0% | |
| PFHpA | 1.8 ng/L | 1.7 | 1.7 J | 0.0% | |
| PFOA | 1.8 ng/L | 2.8 | 2.6 | 7.4% | |
| PFDA | 1.8 ng/L | 0.30 J | 1.8 U | NC | ± RL |
| PFBS | 1.8 ng/L | 2.6 | 2.6 | 0.0% | |
| PFPeS | 1.8 ng/L | 0.37 J | 0.44 J | 17% | |
| PFHxS | 1.8 ng/L | 2.2 | 2.1 | 4.7% | |
| PFOS | 1.8 ng/L | 1.1 J | 1.1 J | 0.0% | |
| FOSA | 1.8 ng/L | 2.5 | 3.7 | 39% | ± RL |
| Samples PWS1129-OS-042821-100 and PWS-FD01-042821 | | | | | |
| PFBA | 4.7 ng/L | 2.3 J | 2.3 J | 0.0% | |
| PFPeA | 1.9 ng/L | 1.5 J | 1.3 J | 14% | |
| PFHxA | 1.9 ng/L | 1.6 J | 1.8 J | 12% | |
| PFHpA | 1.9 ng/L | 1.1 J | 0.59 J | 60% | J-FD |
| PFOA | 1.9 ng/L | 2.7 | 2.1 | 25% | |
| PFBS | 1.9 ng/L | 1.2 J | 1.2 J | 0.0% | |
| PFHxS | 1.9 ng/L | 0.84 J | 0.77 J | 8.7% | |
| PFOS | 1.9 ng/L | 3.4 | 3.0 | 13% | |
| Samples PWS1118-OS-042821-100 and PWS-FD02-042821 | | | | | |
| PFBA | 4.8 ng/L | 5.7 | 5.9 | 3.4% | |
| PFPeA | 1.9 ng/L | 0.89 J | 0.95 J | 7% | |
| PFHxA | 1.9 ng/L | 1.2 J | 1.4 J | 15% | |
| PFHpA | 1.9 ng/L | 0.68 J | 0.67 J | 1% | |
| PFOA | 1.9 ng/L | 2.2 | 2.2 | 0.0% | |
| PFDA | 1.9 ng/L | 0.37 J | 1.9 U | NC | ± RL |
| PFBS | 1.9 ng/L | 2.2 | 2.0 | 9.5% | |
| PFHxS | 1.9 ng/L | 0.77 J | 0.67 J | 13.9% | |
| PFOS | 1.9 ng/L | 3.9 | 3.8 | 2.6% | |

| Analyte | Average Reporting Limit | Primary Result | Duplicate Result | Relative Percent Difference | Notes |
|---|---|---|---|---|---|

**Notes:**
FOSA = perfluorooctanesulfonamide
NC = not calculable
ng/L = nanograms per liter
PFBA = perfluorobutanoic acid
PFBS = perfluorobutanesulfonic acid
PFDA = perfluorodecanoic acid
PFHpA = perfluoroheptanoic acid
PFHpS = perfluoroheptanesulfonic acid
PFHxA = perfluorohexanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanoic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid
PFPeA = perfluoropentanoic acid
PFPeS = perfluoropentanesulfonic acid

**Qualifiers:**
J = The reported result was an estimated value with an unknown bias.
U = The analyte was not detected.

**Reason Codes:**
FD = Imprecision between primary and field duplicate results.
< 2RL = The detected concentrations are less than twice the RL and the relative percent difference between results is less than 50%, indicating acceptable sampling and analytical precision.
± RL = The difference between analyte concentrations is less than the reporting limit, indicating acceptable sampling and analytical precision.

**Table 2**
**Qualifiers Added During Validation**

| Field Sample Identification | Analyte | Concentration | Qualifier and Reason Code |
|---|---|---|---|
| PWS1100-IS-050621-100 | Perfluorooctanesulfonic acid | 3.7 ng/L | J EMPC |
| PWS1100-IS-050621-100 | Perfluorohexanesulfonic acid | 1.3 ng/L | J DL |
| PWS1100-IS-050621-100 | Perfluoroheptanoic acid | 0.77 ng/L | J DL |
| PWS1100-IS-050621-100 | Perfluorooctane sulfonamide | 0.84 ng/L | J DL |
| PWS1112-OS-050721-100 | Perfluorobutanesulfonic acid | 0.42 ng/L | J DL |
| PWS1113-OS-050721-100 | Perfluorobutanesulfonic acid | 0.35 ng/L | J DL |
| PWS1130-OS-050621-100 | Perfluoropentanesulfonic acid | 0.44 ng/L | J DL |
| PWS1130-OS-050621-100 | Perfluoroheptanoic acid | 1.1 ng/L | J DL |
| PWS1130-OS-050621-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1154-OS-050621-100 | Perfluorooctanesulfonic acid | 6.4 ng/L | J EMPC |
| PWS1154-OS-050621-100 | Perfluoropentanesulfonic acid | 0.26 ng/L | J DL |
| PWS1154-OS-050621-100 | Perfluorohexanesulfonic acid | 1.4 ng/L | J DL |
| PWS1154-OS-050621-100 | Perfluorobutanoic acid | 2.4 ng/L | J DL |
| PWS1154-OS-050621-100 | Perfluorobutanesulfonic acid | 1.5 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluoropentanoic acid | 0.59 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluoropentanesulfonic acid | 0.93 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluorohexanoic acid | 0.77 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluorooctanoic acid | 1.5 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluorobutanoic acid | 3.0 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluoroheptanoic acid | 0.35 ng/L | J DL |
| PWS1185-OS-050721-100 | Perfluorooctane sulfonamide | 0.95 ng/L | J DL |
| PWS1193-OS-050721-100 | Perfluoropentanesulfonic acid | 1.4 ng/L | J DL |
| PWS1193-OS-050721-100 | Perfluoroheptanoic acid | 1.4 ng/L | J DL |
| PWS1193-OS-050721-100 | Perfluorononanoic acid | 0.40 ng/L | J DL |
| PWS1193-OS-050721-100 | Perfluorooctane sulfonamide | 0.88 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluoropentanoic acid | 1.6 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluoropentanesulfonic acid | 0.40 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluorohexanoic acid | 1.1 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluorohexanesulfonic acid | 1.6 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluoroheptanoic acid | 0.55 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluoroheptanesulfonic acid | 0.16 ng/L | J DL |
| PWS1196-OS-050721-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1197-OS-050721-100 | Perfluorodecanoic acid | 0.50 ng/L | J DL |
| PWS1197-OS-050721-100 | Perfluorohexanesulfonic acid | 1.0 ng/L | J DL |
| PWS1197-OS-050721-100 | Perfluorononanoic acid | 0.35 ng/L | J DL |
| PWS1197-OS-050721-100 | Perfluorooctane sulfonamide | 1.1 ng/L | J DL |
| PWS1198-IS-050721-100 | Perfluoropentanesulfonic acid | 0.39 ng/L | J DL |
| PWS1198-IS-050721-100 | Perfluoroheptanoic acid | 1.5 ng/L | J DL |
| PWS1198-IS-050721-100 | Perfluorooctane sulfonamide | 0.94 ng/L | J DL |
| PWS1203-OS-050621-100 | Perfluorooctanesulfonic acid | 3.3 ng/L | J EMPC |
| PWS1203-OS-050621-100 | Perfluoropentanesulfonic acid | 1.1 ng/L | J DL |
| PWS1203-OS-050621-100 | Perfluorobutanesulfonic acid | 1.6 ng/L | J DL |
| PWS1203-OS-050621-100 | Perfluoroheptanoic acid | 0.98 ng/L | J DL |
| PWS1203-OS-050621-100 | Perfluoroheptanesulfonic acid | 0.28 ng/L | J DL |
| PWS1203-OS-050621-100 | Perfluorooctane sulfonamide | 0.85 ng/L | J DL |

## Table 2
## Qualifiers Added During Validation

**Note:**
ng/L = nanograms per liter

**Qualifier:**
J = The reported result was an estimated value with an unknown bias.

**Reason Codes:**
DL = The detected concentrations is less than the reporting limit.
EMPC = Transition ion ratios were outside of expected limits.